

Module 2 Draft
BMPF7005

Cierra Jordan
2242371

Word Count: 4,725

Critically evaluate a selected range of methodological approaches appropriate for research in work-based settings, with due consideration to research ethics and insider research issues.

Introduction

As a contemporary voice teacher, my goal within this assignment is to gain clarity and understanding of my own worldview as it plays a vital role in the way I will approach upcoming research, specifically in regards to riffing. This essay will address a plethora of items, including ontological and epistemological paradigms, methodologies, various research methods, and the importance of ethics. I will critically analyze each option as a way of gaining clarity on which will be used within my own research. If I'm honest, these items are ones I have not considered previously and therefore, feel a little overwhelmed to unpack. Nevertheless, it is necessary to do so in order to begin my own personal research of riffing; how it happens and how it is taught effectively to singers in the contemporary world.

Paradigms

Consciously, I have a general awareness that not everyone has the same beliefs as me, but I wonder if I have simplified it to just that, instead of the complexities of how each of us view reality and therefore navigate it. Paradigms are a "loose collection of logically related assumptions, concepts, or propositions that orient thinking and research (Bogdan & Biklen 1998, pp. 22), which influences research choices. While navigating various paradigms, there are three pillars (Ontology, Epistemology, and Axiology) that play a role in identifying which one I align with (Chilisa & Kawulich, 2012).

- **Ontology** refers to "the science of being". It answers the question "How do I see reality?" It is derived from the Greek word "ontologia", which means "to be" (Killam, 2013). Within the umbrella of ontology, we have three viewpoints: objective, subjective, and constructionist (Crotty, 1998). Objective viewpoints root themselves in verifiable facts and evidence or an independent truth, whereas subjective viewpoints root themselves in feelings and opinions, seeing reality in multiple forms without a singular truth (Phillips, D. C. 1995). If the two are lumped together, we get the constructionist viewpoint, which means reality is co-created and socially constructed. In comparison, the constructivist viewpoint does support the idea of multiple realities, however, it focuses on how we perceive the world as individuals (Lincoln and Guba, 1985).

I find myself within the constructionist, believing in one God as the source of and the sustainer of all things while also acknowledging free will and choice (Keengwe, J. 2018). I do not believe in being able to alter the truth based on how I feel, but that things are intricately created and work together in an intentional way. I get to choose how I take this truth and exist within the community. This belief system will create the foundation for the way I approach my future research.

- **Epistemology** refers to the “theory of knowledge”. It answers the question “What is knowledge?” and is derived from the Greek words episteme, meaning knowledge and epistania, meaning to understand or know (Killam, 2013). This branch is important because it helps differentiate between belief and opinion.

Building upon my ontological viewpoint, I find myself viewing knowledge as an extension of the source, while also understanding that we have been given tools to uncover the intentionality of creation through science and research. All the systems in place have already been created, which we know from experiencing singers doing the very things we want to understand. Therefore, are simply invited into the process of uncovering what the “how” is. This allows me to stay curious as I approach the research of riffing as a way of uncovering the science behind what mental and physical components are at play during active riffing.

- **Axiology** refers to the “nature of ethical behavior”. It answers the question “What is valuable and ethical? (Killam, 2013). It is derived from the Greek word “axios”, meaning “value”. Within the realm of axiology are two aspects to consider: ethics and aesthetics. Ethics concerns itself with what is right or wrong, fair, kind, and honest. Aesthetics digs into the concepts of beauty and meaning, answering the question, “Why does this pull at my heartstrings? Why is this beautiful to me?” The sole focus is appreciating and finding joy in the little things, while considering how those values may play a role in my research.

Though I have many values I choose to tie myself to, a few of my most important values within the studio are safety, intentionality, honesty/integrity, hard work, and encouragement. It is extremely important to me that students feel welcome and safe. This is created by giving the student permission to be where they are physically,

emotionally, spiritually, and vocally, and then approaching further development and opportunities with intentionality, honesty, hard work, and encouragement.

There are 4 main paradigms used in research.

- The **Positivist** Paradigm heads toward an objective truth through experiments. This means the researcher must put beliefs aside and be impartial. Oftentimes, this type of research entails something quantifiable and measurable (Omori et. al. 1996). There can be problems with this approach as it raises ethical issues due its invasive nature and can create many fragmented studies.
- **Social Constructivist/Interpretivism** acknowledges reality to be socially constructed and seen through the lens of the human eye. This opens us up to multiple realities and engaging in social observation. With this approach, the researcher doesn't necessarily have a hypothesis going in but is just trying to uncover new meaning. There is a lot of gray area and the researcher tends to be actively engaged in the experiment, even as they observe.
- The **Pragmatic** Paradigm is often useful for singing teachers, because it sees reality as evolving and changing, which means it is not something we can consider concrete, and it allows teachers to dive deep to solve a problem within the studio. This research approach is highly flexible and accepts the gray area. This might be a great option for my own research, as I would be able to remain curious and be involved in the process while teaching my private students. I could record the questions I ask and their responses to gather data.
- The **Transformative/Socio-Critical** Paradigm tends to pinpoint a distinct political agenda, emancipating the marginalized. This can present as feminism, marxism, or anything that is transforming the lives of those in the community, such as singing for health (Dementia, Alzheimer's, etc) (Jackson, K.M., 2018).

Methodology

Under the umbrella of paradigms are methodologies, which are the little pockets of knowledge that help create the framework by which research is conducted. We can think of a methodology as an outline of rules that our methods live in. There are two main methodologies; qualitative and quantitative, with an additional option known as mixed methods.

- **Qualitative** methods deal with *qualities* that are predominately not numerical and specifically look for meaning and experience. There is a focus on observation, language, and developing a theory. This tends to fall within an inductive approach, which will be addressed later in this assignment. This method is typically used when the researcher wants to understand something and therefore they are leaving questions open-ended with the hopes of categorizing and interpreting the results. Qualitative methods utilize a smaller group of individuals (Creswell, J.W. 2014), which may be helpful to keep it personal. However, this route can be deemed inconclusive as results can be inconsistent based on interpretation or bias. I do believe this method would be helpful in my own research in order to gain information on how other voice teachers are approaching the topic of riffing and even as a way to get feedback from singers who riff. The responses could potentially help narrow down my focus as I approach more quantitative data.
- **Quantitative** methods focus on *quantities* or *quantifiable data*, such as height, number of people, time, etc (Creswell, J.W. 2014). Within the quantitative method, we tend to look for cause and effect while testing a theory, which falls within the deductive approach, also addressed later. When going this route, we are specifically looking for numerical findings; something measurable and concrete. This method is commonly used when researchers want to test or confirm something specific, asking close-ended questions and allowing for a measured, replicable process. This tends to include a larger group of respondents, such as how many female/male participants, age ranges, hours practiced, etc. This produces more “concrete” evidence and is commonly seen as more credible in the research world, while also providing large-scale data collection, anonymity, cost-effectiveness, flexibility, and accessibility. On the flip side, it has various cons, such as the misinterpretation of questions, low response rates, limited depth of information, and the inability to capture non-verbal cues. This type of research will be beneficial later in my research process when it is time to pinpoint a measurable factor for singers.
- **Mixed** methods are a combination of both, qualitative and quantitative. This is a prominent choice within the research community because it allows researchers to dabble in both. While it offers lots of benefits, such as gathering lots of information, it does increase the organization and cognitive loads and can cause ethical issues. In order to be successful navigating this route, researchers must be up to date on current literature and proceed carefully, while being fully aware of the limitations that are present. This

method may look like conducting a survey, gathering trends, and then breaking into dialogue or it can be vice versa with interviews followed by a survey.

Inductive, Deductive, and Abductive Reasoning

There are three types of reasoning, two of which were mentioned previously in passing. These categories are vital in regard to gaining clarity as we move toward deciding an approach for our research.

- **Inductive Reasoning** is when a theory emerges *from* the data, without preconceived notions. The researcher makes observations, ascertains a pattern if possible, and then forms a generalization based on what is known, which can be concluded as inconclusive. The pattern of observing, finding patterns, and creating theories then repeats. Many scientific research uses this form of reasoning because it does increase human knowledge. However, the results usually cannot guarantee a concrete conclusion, even after many times through the cycle, which leaves the findings as a mere suggestion or inconclusive, instead of a definite conclusion (Slade, 1991).
- **Deductive Reasoning** contrasts inductive reasoning as it approaches research with an assumption that we are looking to approve or disprove, instead of developing new knowledge. A theory is put forth and then the hypothesis is tested. Within this form of reasoning, there is a use of generally accepted statements or facts that then move to a specific application. Something to note about this approach is that sometimes the premise can be false, but the process can still be valid because it still follows logic. However, if your premise is incorrect, your conclusion is unsound. With this route, we are looking for a guaranteed conclusion (Slade, 1991).
- **Abductive Reasoning** moves between inductive and deductive approaches. This is a typical route for social science researchers because it allows for exploration in both and can provide a plausible explanation for any given phenomenon, or the most-likely account. Within this form of reasoning, we are specifically seeking whichever explanation fits best and leaves us with the *fewest* assumptions. With this, there is a level of incompleteness because we are forming a conclusion based on the known information, while also acknowledging there is more information out there. It is a plausible logic based on what we currently know, or a best explanation, keeping the door open for additional possibilities (Slade, 1991).

Research Strategies

- **Ethnography** is a qualitative framework that studies culture and society, considering how people behave, interact, and think, giving a detailed understanding of their reality. I am particularly interested in conversation. Singing teachers are often part of the study (Easterby-Smith et al 2008), immersing themselves in the community, which can make it a little more of a challenge. However, this is a popular method amongst researchers and is commonly conducted through participant observation, though can also include semi-structured or unstructured interviews, verbal descriptions, or textual analysis, which will be covered later.
- **Grounded Theory** is an increasingly popular approach that starts with nothing and gradually uncovers meaning, literature, theories, etc. It is a rigorous, inductive process that gathers data, weighs possible theoretical understandings, develops tentative interpretations, devises a new plan, and then returns to redo within the new understanding. The goal is to keep narrowing down and refining the data. Within this approach, the coding process is extremely tedious and requires much attention, while also consuming lots of time and operating in redundant circles.
- **Hermeneutics & Phenomenology** are two terms that are used interchangeably as both are concerned with human experience. However, they are slightly different in that hermeneutics often works with dialogue and texts, swinging toward subjectivism with emphasis on reflection, while Phenomenology holds onto objectivism with a more traditional approach of being separate from the research in that it studies the individual's experiences within the world. The paradigm of social constructivism is built on this strand of philosophy as it is a counter-movement of positivism. The focus zooms in to a specific aspect of the research, but then returns to the whole again to avoid moving off on a tangent and losing sight of the initial research question we are trying to answer.
- **Action Research**, which fits within the transformative paradigm, looks to improve the social situation and is usually rooted in political agenda. It tends to be democratic and collaborative, aiming to see social change in the community they are actively immersed in. This form of research involves a repeated cycle of reflection, observation, and planning or acting. The goal is transformation, hence its role in the transformative paradigm (Kitchen et al, 2008).
- **Case Studies** is a focused approach of the findings in a single setting and allows for the combining of various methods, such as observation, interview, and text analysis. They can focus on an individual but may also hone in on a group or community. Case studies are helpful because they identify key concepts and themes across the data. However,

they are criticized and can sometimes be seen as invalid due to their singular nature, leaving the findings to be considered as subjective and generalized. With time, these studies may lead to larger studies that can build upon a theory (Eisenhardt, 1989).

Research Methods

Research Methods are the steps or tools used to gather data to ideally answer the research question at hand. Before we can choose a method, we have to understand the different types of samples, or participation selection, we can choose from (Cohen et al, 2018).

Types of Samples

- A **Convenience Sample** is exactly what it sounds like, a group of people who are conveniently already immersed. This usually looks like a small handful of students who are already in the studio. They are accessible and available, leaving no need to go out and find willing subjects. This would be a great option for me within my studio, as I already have access to singers who can riff.
- A **Purposive Sample** is one that is purposely selected because there is an assumption that that grouping has the data being sought after. It usually is representative of a larger group. This type of sample would be great in regard to pinpointing specific voice teachers who teach rifting to grasp what they know and how they teach rifting.
- **Snowball Sampling** happens when the subjects from convenience sampling start referring the research method to their friends, which in turn creates a snowball effect and therefore, collects a lot of data for the researcher. Social media is a great tool for this type of sampling.
- **Quota Sampling** aims to establish specific characteristics of a specific group and then target a specific section. Their hope is that their findings can then be applied to a larger population.

Below are some of the most common methods, broken down between our two main branches, qualitative or quantitative (Creswell, 2014.).

Qualitative Research Methods

- **Interviews** are a time of open dialogue between the researcher and subject. They can be structured, unstructured, or semi-structured. Structured interviews use the same set of detailed questions with very intentional wording to verify the

subject knows what is being asked. This approach is seeking very specific responses. Unstructured interviews allow for wording variations to questions and individualized questions. This approach is adaptable and flexible, though data can be vast and deemed inconsistent. Semi-Structured interviews utilizes a base set of questions and then creates the freedom to pose follow-up questions based on what information is provided. I plan to utilize interviews in my initial phase of research to gain baseline information of where we are as a community regarding my chosen topic.

- **Focus Groups** are an informal interview style used for smaller groups with the intention to elicit discussion and create space for opinions. This is a great method for subjects with limited availability and allows the researcher to gather info all at once. The disadvantages of this approach are difficulty analyzing all the data, cost, sensitivity of topics, moderator or group bias, and difficulty engaging the whole group.
- **Observations** are an extremely subjective approach that can be helpful if the researcher fully understands what is being observed and why. However, it is common for observations to be deemed unreliable, especially if the researcher is actively involved in what is being observed. There are four common types of observation. Unstructured observations can be helpful if the researcher has yet to pinpoint the details of the research. This is often used to gain clarity of the hypothesis. Structured observations usually use some form of template to keep data structured and are approached with a pre-determined focus, which can therefore be criticized for its potential bias. Participant Observation is a complicated option that includes the researcher actively teaching or participating while observing the subject. Non-Participant Observation happens when the researcher is present but uninvolved in the teaching or activity happening.
- **Video/Audio Recording** is a tool by which the researcher can capture the subject and be able to replay in hopes of gathering more clarity and information.
- A **diary** can be a useful qualitative method as it captures the thoughts, experiences, and activities of the subject over a specific span of time.

Quantitative Research Methods

- A **Questionnaire** is a popular method for gathering very specific information from a large group of people. It can provide tangible, numerical results that draw conclusions to trends and provide insights to the researcher. Questionnaires are

a cost-effective way to do large-scale data collection and often provide anonymity to the subject. The cons of this approach are the possibility of minimal responses, misinterpretation of the material, a lack of context, and difficulty capturing the detailed, nuanced information.

- **Experiments** are a data collection method of manipulating variables to find a cause-and-effect relationship with very specific metrics. This approach allows for researchers to be very intentional and strategic with their variables and can therefore seek specific results. The disadvantage of this approach is that it can be extremely time-consuming and costly.
- **Content Analysis** is a way to gather common themes, words, and concepts that come from qualitative data. Researchers establish their coding metrics prior to viewing the material and therefore are able to quantify the findings, which can help move the research from qualitative to quantitative. It can be time consuming and labor-intensive and can be challenged in regards to reliability and validity.

Ethics

Prior to the onset of any research is the intentionality of ethics and its implications. The reality is that ethical issues are a fundamental consideration of most practical research domains, even the most simple and innocent ones. At its core, we are considering this idea of “centrality of beneficence”, which means doing or promoting “good” and being sure that we do no harm to ourselves or our subjects within the research process. When Hippocrates originally brought to light the idea of “non-maleficence”, meaning “do no harm”, the intention was specifically in regards to the body (2019). However, over time, what constitutes the “body” has changed and therefore, we must determine what that means for our research, in hopes to eliminate harm, both directly and indirectly, whether that contains an individual or group.

The basic principles of ethics, known as the Belmont Principles (Mathur et al. 2014), are respect, beneficence, non-maleficence, and distributive justice. In its simplest form, we are saying to respect individuals, promote good, do no harm, and evenly distribute benefits & burden. We are considering basic human rights and respect for others, including concepts like privacy, autonomy, diversity of lifestyles, values, attitudes, and protection, just to name a few. Privacy and autonomy include any and all facts or details that could distinguish the identity of the subject, as well as the way data is stored and shared. When it comes to diversity of lifestyles, values, and attitudes, we are talking about creating a safe space for diversity and

inclusion. Then when we consider protection, we are weighing risk and working to eliminate where possible. Within this, there might be potential benefits that also pose a concern for harm, specifically for vulnerable subjects.

Within research, vulnerable subjects include all children under the age of 18, as well as adults with specific metrics that show vulnerability, specifically pregnant women, prisoners, those with special needs or diminished mental capacity, or those educationally and/or economically disadvantaged. When working with this group, the researcher must obtain a background check through the Disclosure and Barring Service. There is an extra level of care and protection that comes into play when utilizing vulnerable subjects, and all of which must be fully aware of what they are signing up for.

One of the best ways to do this is through honesty, which is one of the ethical integrity principles. Though I do not plan to utilize vulnerable persons in my own research, I still desire to be transparent and forthcoming in all aspects of the research process, including the communication of any and all physical and psychological risks, potential emotional distress, and the possibility of suspicion within an organization if applicable. Other integrity principles include accountability, professional courtesy and fairness, and good stewardship. These principles hold all researchers to a high standard and create a sense of care and intentionality.

Consent is a popular topic, with very strict guidelines. All participating subjects must receive verbal or written instructions prior to signing consent that includes what is expected, how long it will take them to complete, what the risks are, how they will be protected, as well as their data, and what their options are. Subjects may withdraw from research at any time. A key principle when discussing potential participation, there must be zero coercion or manipulation. All subjects must volunteer to participate and provide informal verbal consent. If anything changes prior to the onset of participation, researchers must gain consent again. The goal is to avoid deception of any kind. Once a subject has decided to participate, they must sign a written agreement. If the subject is a minor, the parent must sign and it is good to obtain a verbal consent from the child if possible. The only time the written consent is negotiable is when there is a language barrier where a translator is needed or if it is deemed culturally offensive or inappropriate to ask. In this case, verbal consent is ok.

There are a few components regarded as research misconduct. These include fabrication, falsification, plagiarism, failure to meet vital obligations, or improper handling of allegations. Fabrication is when the researcher makes up results that did not come from the data and presents them as real. Falsification is similar in regard to misinformation, however with falsification, the researcher is making edits or manipulating the data they have collected. Plagiarism is a commonly known term referring to the use of someone else's findings or data without giving them credit and therefore, intentionally or unintentionally claiming it as their own data. Failure to meet vital obligations include ethically, legally, or professionally. This can look like a break of confidentiality, a failure to communicate competing interests, or misrepresenting themselves or the material. With being within the research process, known as an insider researcher (Costley et al, 2010), it will be vital for me to be very clear with all persons and data so that lines do not get blurred and biases are eliminated as much as possible. Lastly, there are times when subjects may disclose information that will require the researcher to act in such a way that may feel like a breach in confidentiality but is in fact for the "good" of the individual. This can include situations regarding abuse, assault, etc. It is unethical to cover up misconduct as everything must remain explicit.

Conclusion (500 words)

This study has provided me with newfound information on paradigms, methodologies, methods, and best practices for ethics, which have challenged me to unpack my own worldview and get clear on what viewpoints and biases I bring to my own research. Though I find the basis of life fixed by one truth, I do believe I'm always evolving within that truth and remaining curious and teachable about what I might uncover. Because of this, I have been drawn to both the positivist and pragmatic paradigms. I like the quantifiable objectivity of the positivist viewpoint while loving the gray area of curiosity and active participation in the pragmatic viewpoint. I can foresee these two viewpoints working together, but I would be lying if I said I wasn't concerned about how it might complicate my research moving forward.

In my next module, I will begin diving into the science of rifting, approaching it from three different angles; how rifting feels to the singer, and how voice teachers actively teach rifting in the studio, and ultimately uncover what is actually happening from a vocal anatomy standpoint while a singer is rifting. The concept and vocal option known as rifting is becoming increasingly popular in the secular world, but specifically in my contemporary studio. In nearly a decade of teaching, I have yet to find tangible evidence of what is happening during vocal rifting and

therefore feel like I'm blindly grasping for tips and tools that I think might help access the result. My core intention is to get answers for this vocal skill and therefore be able to provide sound, applicable tools to teachers and students on their vocal journey. I am interested in possibly using various case studies to collect necessary data.

When considering the exploration of riffing from a sensory approach, my initial thought is to create a purposive sample of selected "riffers" and conduct interviews, which would allow me to gather data and hopefully begin to concoct a hypothesis of what *might* be happening physically. This interview would most likely be semi-structured, allowing for follow up questions to gain increased clarity and understanding. I would then refine the information, and therefore refine the questions before revisiting the subjects.

In regard to teaching methods surrounding this topic, I might follow the same concept of interviews, but this purposive sample would include contemporary voice teachers only. I would also have the option of doing a separate case study targeting classical teachers in regard to the way they approach teaching melismas, but that would add another layer to the data. Nonetheless, I do think that could be a very helpful layer. Once I have a theory regarding what is providing results within the studio, I would test the tools within my own studio via targeted instructions and opportunity for feedback.

Lastly, I would ultimately love to uncover what is physically happening while riffing is taking place in the body. Though extremely expensive and tedious, I would deem an MRI the most suitable option to be able to see what is actively present. Without the visual, it will be difficult to obtain quantifiable research, especially if the way I am gathering the data is through qualitative methods. It leaves much room for the research being deemed inconclusive and unreliable.

I acknowledge this is an extreme undertaking to uncover the truth. However, I am extremely passionate about this topic and am eager to dive in, even if it ends up being just a small piece to a much larger puzzle. I am dedicated to creating a safe space with a sound ethical framework while navigating the research process and look forward to what is ahead.

References

- Bengtson, S.S.E. and Barnett, R. (2020). The Four Pillars of Philosophy in Higher Education. *Oxford Research Encyclopedia of Education*.
doi:<https://doi.org/10.1093/acrefore/9780190264093.013.1467>.
- Bogdan, R. and Sari Knopp Biklen (1998). *Qualitative research for education : an introduction to theory and methods*. Boston: Allyn And Bacon.
- Bryman, A. (2012). *Social Research Methods*. 4th ed. [online] Oxford: Oxford University Press. Available at:
https://www.academia.edu/97136619/Alan_Bryman_Social_Research_Methods_4th_Edition_Oxford_University_Press_2012_.
- Cohen, L., Manion, L. and Morrison, K. (2018). *Research methods in education*. 8th ed. London, England ; New York, New York: Routledge.
- Costley, C., Elliott, G. and Gibbs, P. (2010). *Doing work based research : Approaches to enquiry for insider-researchers*. London: Sage.
- Creswell, J.W. (2014). *Research Design: Qualitative, quantitative, and Mixed Methods Approaches*. 4th ed. [online] London: Sage Publications Ltd. Available at:
https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf.
- Crotty, M. (1998). *Foundations of Social Research : Meaning and Perspective in the Research process*. S.L.: Sage Publications.
- Easterby-Smith, M., Thorpe, R. and Jackson, P. (2008). *Management research*. London: Sage Publications Ltd.
- Eisenhardt, K.M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), pp.532–550.
- Georgetown.edu. (2019). *Ethical and Policy Issues in Research Involving Human Participants - Volume I*. [online] Available at: <http://bioethics.georgetown.edu/nbac/human/overvol1.html> [Accessed 30 Oct. 2019].

Grix, J. (2002). Introducing Students to the Generic Terminology of Social Research. *Politics*, 22(3), pp.175–186. doi:<https://doi.org/10.1111/1467-9256.00173>.

Halse, C. and Honey, A. (2005). Unraveling Ethics: Illuminating the Moral Dilemmas of Research Ethics. *Signs: Journal of Women in Culture and Society*, 30(4), pp.2141–2162. doi:<https://doi.org/10.1086/428419>.

Hammersley, M. and Atkinson, P. (1995). *Ethnography : Principles and practice*. London, UK: Holt, Rinehart, And Winston.

Jackson, K.M., Pukys, S., Castro, A., Hermosura, L., Mendez, J., Vohra-Gupta, S., Padilla, Y. and Morales, G. (2018). Using the transformative paradigm to conduct a mixed methods needs assessment of a marginalized community: Methodological lessons and implications. *Evaluation and Program Planning*, [online] 66(66), pp.111–119. doi:<https://doi.org/10.1016/j.evalprogplan.2017.09.010>.

Keengwe, J. (2018). Handbook of Research on Mobile Technology, Constructivism, and Meaningful Learning. *Advances in Educational Technologies and Instructional Design*. doi:<https://doi.org/10.4018/978-1-5225-3949-0>.

Killam, L. (2013). *Research terminology simplified*. Laura Killam.

Kitchen, J. and Stevens, D. (2008). Action research in teacher education. *Action Research*, 6(1), pp.7–28. doi:<https://doi.org/10.1177/1476750307083716>.

Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry*. London: Sage Publications.

Mathur, S.R. and Corley, K.M. (2014). Bringing Ethics into the Classroom: Making a Case for Frameworks, Multiple Perspectives and Narrative Sharing. *International Education Studies*, [online] 7(9). doi:<https://doi.org/10.5539/ies.v7n9p136>.

Omori, K., Kacker, A., Carroll, L.M., Riley, W.D. and Blaugrund, S.M. (1996). Singing power ratio: Quantitative evaluation of singing voice quality. *Journal of Voice*, 10(3), pp.228–235. doi:[https://doi.org/10.1016/s0892-1997\(96\)80003-8](https://doi.org/10.1016/s0892-1997(96)80003-8).

Phillips, D.C. (1995). The Good, the Bad, and the Ugly: The Many Faces of Constructivism. *Educational Researcher*, 24(7), pp.5–12. doi:<https://doi.org/10.3102/0013189x024007005>.

Philosophy (2023). *Axiology: Explanation and Examples*. [online] Philosophy Terms. Available at: <https://philosophyterms.com/axiology/>.

Shannon-Baker, P. (2023). Philosophical underpinnings of mixed methods research in education. *International Encyclopedia of Education (Fourth Edition)*, pp.380–389. doi:<https://doi.org/10.1016/b978-0-12-818630-5.11037-1>.

Slade, S. (1991). Case-Based Reasoning: A Research Paradigm. *AI Magazine*, [online] 12(1), pp.42–42. doi:<https://doi.org/10.1609/aimag.v12i1.883>.

Sol, K. and Heng, K. (2022). Understanding epistemology and its key approaches in research. *Cambodian Journal of Educational Research*, [online] 2(2), pp.80–99. doi:<https://doi.org/10.62037/cjer.2022.02.02.05>.

Willig, C. (2019). Ontological and epistemological reflexivity: A core skill for therapists. *Counselling and Psychotherapy Research*, 19(3). doi:<https://doi.org/10.1002/capr.12204>.

Wright, J. (2015). *International Encyclopedia of the Social & Behavioural Sciences*. 2nd ed. [online] Amsterdam: Elsevier, pp.748–752. Available at: <https://www.sciencedirect.com/referencework/9780080970875/international-encyclopedia-of-the-social-and-behavioral-sciences#book-info>.

Yazan, B. (2015). Three Approaches to Case Study Methods in Education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), pp.134–152.

Yvonne Feilzer, M. (2010). Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm. *Journal of Mixed Methods Research*, [online] 4(1), pp.6–16. doi:<https://doi.org/10.1177/1558689809349691>.