



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Developing Research Topic, Problem, Aims and Objectives

Prof. Edmond A. Agyeman (PhD)

University of Skills Training and Entrepreneurial Development
(USTED).

eaagyeman@aamusted.edu.gh

Presented at DAAD PhD Proposal Writing Workshop

Eusbett Hotel, 27-28 July, 2026 - Organizers: DAAD





**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Table of Contents:

- Preparing for Research
- Choosing a Topic/Project
- Problem statement
- Aims and Objectives
- Research Proposal
- References



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

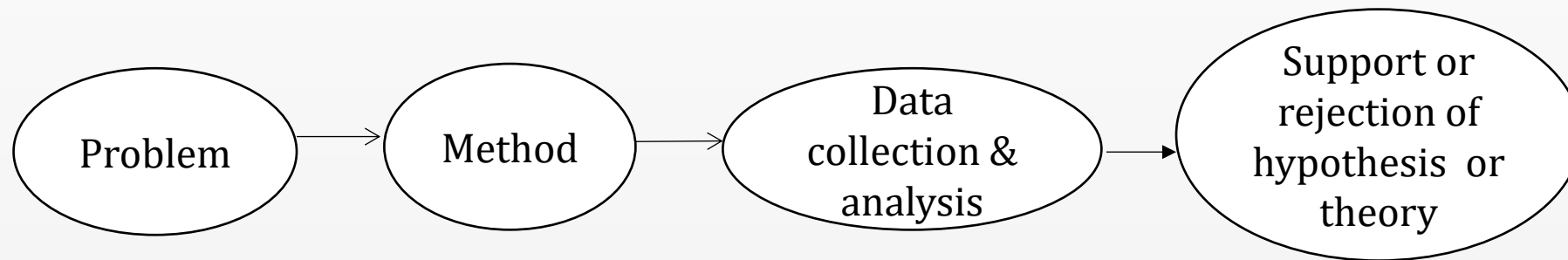
Preparing for Research



Preparing for Research

“Despite all the myths about how research is done, it’s actually a messy process that’s cleaned up in the reporting of results” (Russel Bernard, 2006: 69)

- The ideal research process is as follows:





**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Choosing a Topic/Project



Choosing a Topic/Project

- Choosing a topic for research, can be a tedious exercise, particularly for young scholars
- It is similar to choosing a career
- However, your ability to choose the right topic at the beginning of your career as researcher can prove crucial for your future success
- “picking a research project can be viewed as a series of discrete steps or thought processes” (Kahn, 1994, 1531).
- Kahn terms these steps “Ten Commandments for Picking a Research Project” + ONE



✓ **Ten Commandments for Picking a Research Project**

- ❑ Anticipate the results before doing the first study
 - Be sure that the result of your study will be interesting
 - Anticipate what are the next series of research you will do after

- ❑ Pick an area on the basis of interest of the outcome
 - Pick an area which is not only of interest to you, but also of interest to the larger scientific community.
 - Results of your study should interest a great number of people
 - ❖ **For example:**
 - ✓ Flooding in Accra
 - ✓ Conflict and peacebuilding in Northern Ghana
 - ✓ The spread of COVID-19 in Accra;
 - ✓ Waste management in Ghana
 - ✓ Agro-chemical usage in northern Ghana etc)
 - ✓ Migration and livelihoods in northern Ghana



✓ **Ten Commandments for Picking a Research Project**

- ❑ Look for an under-occupied niche that has potential
 - venturing into areas that are not being studied by the major investigators
 - This is where innovation comes in
 - You avoid competing with recognized researchers or your mentors
(For example: Return migration to Ghana; African Migrants in Japan)
 - You contribute rather than competing

- ❑ Go to talks and read papers outside your area of interest.
 - Listening to talks and reading papers outside your area of interest can point you to new direction
 - You can improve your creativity and innovativeness
 - Seek advise from mentors and senior scholars



AKENTEN
APPIAH-MENKA
UNIVERSITY

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Ten Commandments for Picking a Research Project

☐ Build on a theme

- Do further explorations on research topics that you have already developed
- For examples, you can build on your undergraduate or master thesis

☐ Find a balance between low-risk and high-risk projects

- Higher-risk, higher-interest projects allow you to make seminal observations.
- They turn to be most interesting and more productive projects (For example, study into fibre optics by Prof. Buah-Bassuah of UCC)
- Other examples in include AI, Machine learning, IOT etc



Ten Commandments for Picking a Research Project

- ☐ Be prepared to pursue a project to any depth necessary
 - If you want to be recognized for your accomplishment in the field
 - Be prepared to bring in collaborators if necessary
 - Be prepared to acquire new skills (**eg, learning the language of the people you want to study; learning new methods**)

- ☐ Differentiate yourself
 - It is important you are able to differentiate yourself from your mentor
 - Be independent and be recognized as an expert at least in some area

- ☐ Do not assume that outstanding, or even good, clinical research is easier than outstanding basic research
 - Outstanding research is difficult and time consuming
 - Longer studies are sometimes more complicated



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Ten Commandments for Picking a Research Project

☐ Focus, Focus, Focus

- Early researchers should focus on one or two research topics
- Should define very limited goals
- It is more experienced researchers that can handle more research projects at a time.



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

+ ONE Commandments

☐ **Beware of AI**

- Do not use AI to write your proposal
- AI can guide, but it should not replace you
- AI should not be the author and owner of your work



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Problem Statement



Research Problem

- At the heart of every research is the problem that the researcher intends to address
- It is a statement of the area of concern which the researcher believes needs scholarly attention (for example, Flooding, desertification, conflict, spread of viruses in Accra, poor waste disposal and climate change and adaptation, AI, Machine learning, Climate related diseases)
- This could be a condition that needs improvement, a problem to be solved or a theory or practice which needs further clarification.
- It is the knowledge gap that the researcher intends to fill
- It is borne out of observation, experience and extensive review of literature
- It is making a case for a fellowship or a research grant



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Research Problem

- In preparing a research project the researcher should undertake the following:
 - ✓ Describe the problem you are addressing
 - ✓ why is it important and worth studying
 - ✓ Indicate who or what this problem affect
 - ✓ Indicate what is the significance of solving the problem
 - ✓ Explain why the project is urgent



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Research problem

- It is out of the problem statement that the research question is formulated
- The research problem can be stated in a question or statement form



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Aims and Objectives



Aims and Objectives

☐ Aims/Purpose/Goal

- What do you propose to do to solve this problem?
- What will be the near-term outcome of your project
- what will change or happen as a result of the project.

☐ Objectives

- What are the specific, measurable, achievable, realistic, time bound (SMART) results your project will deliver – these are the PROJECT OBJECTIVES.
- This includes the deliverables



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Research Proposal



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Research Proposal

- What is a research proposal?
- “A research proposal is a concise and coherent summary of your proposed research. It sets out the central issues or questions that you intend to address. It outlines the general area of study within which your research falls, referring to the current state of knowledge and any recent debates on the topic. It also demonstrates the originality of your proposed research” (Cf. University of Birmingham, 2018)



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Research Proposal

- A research proposal is one of several application documents that one requires in order to secure funding for PhD studies
 - Others include:
 - CV
 - language proficiency certifications
 - recommendation letters
 - justification, etc.
 - Employer permissions and guarantee of re-engagement after your study



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Main Features of a Proposal

- A good proposal should have the following features:
 - ✓ Clear Topic
 - ✓ Problem statement/background/context
 - ✓ Objectives
 - ✓ Questions
 - ✓ Design and Methods
 - ✓ Relevance
 - ✓ Ethical Issues



Taking a Realistic Approach

- In any research that you want to pursue, you need to ask your self **five questions**, if your **answer to any of these is negative then there are chances that you would regret.**
- 1. Does this topic (research site or data collection method) really interest me? (Research must be fun).
 - ✓ You must enjoy what you are doing. You must avoid doing research out of convenience and without enthusiasm
- 2. Is my research problem amendable to scientific enquiry?



Taking a Realistic Approach Cont.

3. Are there adequate resources available to investigate this topic? To study this population at this particular site? To use this particular data collection method? (Time, money and people, including yourself)
4. Will my research question or data collection method raise a serious ethical issue?
5. Is the topic of theoretical or practical interest?



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Thank you



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Qualitative Methodologies



Qualitative Methodologies

- There are several of them, however, the most commonly used are:
 - ✓ Grounded theory
 - ✓ Ethnography
 - ✓ Phenomenology
 - ✓ Narrative Inquiry
 - ✓ Case Study



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Grounded Theory

- The purpose is to study the experience of participants in order to develop a theory grounded in the data collected.
- Through this approach, the researcher is able to construct hypothesis and make predictions about other experiences
- It leads to generalization
- It is applied a lot in clinical psychology



Ethnography

- It is the study of a group of individuals within the setting in which they live/work to construct the shared pattern of group behaviour, culture, beliefs, languages, etc.
- It draws on a range of data including field notes, interviews, transcripts, documents, artifacts in order to generate themes, issues etc.
- There are several types of ethnography:
 - ✓ Realist ethnography (objective, scientifically written)
 - ✓ Confessional ethnography (report of ethnographer's field work)
 - ✓ Autoethnography (reflective examination of ethnographers experience)
 - ✓ Micro ethnography (focused on a specific aspect of a group)



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Types of Ethnography Cont.

- ✓ Critical Ethnography (Focused on a shared pattern of live of a marginalized group with the goal of advocacy)
- ✓ Feminist ethnography (focuses on women and cultural practices that disempower and oppress)



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Phenomenology

- This studies phenomenon that a number of individuals share
 - ✓ For example: “One corner” Dance; Pentecostalism; Prayer camps
- It discerns the core or the essence of the phenomenon
- It is grounded in the lived experiences of people but also attempts to transcend that experience
- It draws primarily on interview data



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Narrative Inquiry

- This approach studies the storied experiences of a person or number of persons
- It describes the lives of individuals
- It collects and tells stories about the life of individuals situated within cultural, social and institutional narratives.
- It writes narratives of the experiences of those individuals.
 - ✓ For example: African women in Rome, child workers in urban communities, head porters.



Narrative Inquiry

- This approach draws on a range of data. E.g.
 - ✓ Conversational transcripts
 - ✓ interview transcripts
 - ✓ Artifacts
 - ✓ Photographs
 - ✓ Documents
 - ✓ field notes
 - ✓ memory box items
 - ✓ autobiographical items
 - ✓ journal writings



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Case Study

- The purpose of case study is to study a bounded system, an individual, whether this individual is a person, an institution or a group such as a school, class, or an event (festival)
- It is meant to provide an in-depth understanding of a case
- Types of case study include:
 - ✓ Intrinsic: the subject of study is the primary interest
 - ✓ Instrumental: it uses a case to get insight into a phenomenon
 - ✓ Multiple cases: uses information from different studies to formulate the case for a new study
 - ✓ Explanatory: an explanation of a question or a phenomenon especially event. E.g. a particular vehicle has series of crashes caused by fault brakes
 - ✓ large scale study
 - ✓ Exploratory: a precursor to a formal



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Types of Data/Data gathering techniques



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Types of Data/Data gathering techniques

- Participant observation
- Interview
- Document
- Others



AKENTEN
APPIAH-MENKA
UNIVERSITY

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Participant Observation

- direct observation of ongoing group life, also referred too as ethnography
- ranges from being a passive observer to active participant



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Participant observation Cont.

- In order to succeed, the researcher has to negotiate the following:
 - a. Gaining access to site or group
 - b. building trust
 - c. Developing and maintaining relationship with informants
 - d. Dealing with attachment and emotions
 - e. Confronting ethical dilemmas
 - f. Deciding when it is time to leave the field



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Interviews

- Types of interviews include:
 - Standardized/Structured interview with open or close ended questions posed to participants (use of interview guide).
 - Semi structured or unstructured or informal interviews
- Unstructured interviews are conversational in style.
 - ✓ This approach is important for gaining in-depth information.
 - ✓ However, it requires adept listening skills and preparedness to improvise and generate questions



Document

- Gathering of personal, public or historic documents:
 - diaries
 - letters
 - biographies
 - autobiographies
 - photographs
 - news papers
 - Archival materials
 - organizational records
 - actuarial records
 - official records
 - manuscripts
 - contracts
 - court proceedings
 - films
 - TV programmes
 - graffiti
 - song lyrics
 - web sites
 - social media
 - internet chat rooms
 - etc.



AKENTEN
APPIAH-MENKA
UNIVERSITY

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Other techniques

- Focus Group Discussion
- Life histories (using one persons first hand account of his life)
- The study of material artifact
- Triangulation (Using a multi-method approach to collect data)



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Data Analysis/ Interpretation



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Data Analysis/ Interpretation

- Analysis is breaking something down into its constituent parts
 - For example when a scientist analyses water, he breaks it down into its constituent parts.
- Analysis involves the following steps:
 - ✓ Data preparation and organization
 - ✓ Coding & memoing
 - ✓ Data interpretation
 - ✓ Reporting



Data preparation & Organization of data

- **Data preparation**

- - Interview tapes transcribed, dated and labeled as to context and participant identities
 - Documents dated and labeled
- - Artifacts dated and labeled as to context

- **Data organization**

- Data can be organized in four ways
 - By types (sorting, interview transcription as distinct from journal records)
 - site (place of data collection)
 - Participants
 - Time interval



Coding and Memoing

- Depending on the research methodology and purpose, data can be coded as follows:
 - ✓ Descriptively (looking for thick descriptions of social processes)
 - ✓ Categorically (looking for types, classes, group categories)
 - ✓ Thematically (looking for themes)
 - ✓ Narratively (looking for similarities in the narratives)



Interpretation of data

- After data has been coded, it is then given an interpretation. There are several approaches to text analysis:

1. **Hermeneutics/interpretative analysis:**

- ✓ derived from biblical hermeneutics or exegesis
- ✓ It is search for meaning and their interconnection in the expression of culture
- ✓ require deep involvement with the culture (knowledge of the language)
- ✓ discover the meaning attached to symbols



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

2. Narrative and performance analysis

- ✓ discovers regularities in how people tell stories and give speeches
- ✓ Analyses of written texts (for example, literary work)

3. Schemas, Models, and metaphors

- ✓ Combined elements of anthropological linguistics and cognitive psychology in the examination of text



**AKENTEN
APPIAH-MENKA
UNIVERSITY**

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

- **Discourse analysis**
- Close study of naturally occurring interaction
- Our discourses are a representation of our culture and ourselves
 - ✓ For example: through discourse analysis, you can determine gendered power relations, respect for adults etc.



AKENTEN
APPIAH-MENKA
UNIVERSITY

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Key Considerations

- Irrespective of the methodologies that one adopts, the main purpose of qualitative research is to understand the meaning of human experience.
- Therefore, the researcher has to take the following precautions



AKENTEN
APPIAH-MENKA
UNIVERSITY

*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Key Considerations cont.

1. Bracketing out his or her subjectivity
2. Setting aside biases
3. Selecting of site and participants.
 - ✓ This is not based on random sampling
 - ✓ Use purposeful sampling



- Maximal variation sampling (range of participants with the most variation in experience is chosen)
- Typical Sampling
- Theory or concept sampling: when a clear understanding of the concept or theory is in place
- Homogeneous sampling: Based on membership with defining characteristics
- Critical sampling of exceptional cases
- Opportunistic sampling: It permit the researcher to take advantage of unfolding event
- Snowball sampling.
- Confirming / disconfirming sampling



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

- Finally, use your imagination and creativity



**AKENTEN
APPIAH-MENKA
UNIVERSITY**
*of Skills Training and Entrepreneurial
Development*

www.aamusted.edu.gh

Thank you



References

- Clandinin, D. J (2005). “Qualitative Analysis, Anthropology”, in Kempt- Leonard K. *Encyclopedia of Social Measurement*, Boston: Elsevier academic press.
pp. 217-223
- Pawlunch, D. (2005). “Qualitative Analysis, Sociology”, in Kempt- Leonard K. *Encyclopedia of Social Measurement*, Boston: Elsevier academic press.
- Bernard H. R.(2006). *Research Methods in Anthropology: Qualitative and Quantitative Approach*, 6th Ed. New Yorke: Attamira Press.