ABANTU ARCHIVES

Traditional Production Tools & Indigenous Technology

SCHOOL-BASED PROJECT · ABANTU ARCHIVES INTEGRATION · 13 CURATED SOURCES

***SBP problem statement**: How can we rebuild pre-colonial tools using modern, recycled, or digital modelling materials — and what do those tools reveal about indigenous technology, materials and environmental knowledge?*

1. Curriculum overview & learning objectives

Syllabus alignment: ZIMSEC Heritage Studies (Forms 1–4): Identity & Cultural Heritage. Designed for local high school scholars and adult learners in the diaspora.

Core learning outcomes:

• Group pre-colonial tools by material composition (stone, wood, iron, clay) and design.

• Situate individual tools within a longer technological and archaeological chronology.

• Evaluate how indigenous knowledge systems — technological, ecological and botanical — continue in present-day Zimbabwe.

• Analyse how traditional tools and plant knowledge show deep ecological adaptation and practical engineering.

2. Differentiated resource tracks

Track	Core materials / access & execution
Local (rural / low-bandwidth)	Clay, cardboard, wire, sticks, old baskets, string, plant dyes. Interview local elders; access Abantu Archives through a teacher's phone or school computer.
Diaspora (digital / global)	3D modelling software (Tinkercad, Blender), CAD tools, digital tablets. Access the Abantu Archives digital catalogue, online museum databases, and archival records.

3. Curated primary & secondary sources

Four sources marked ★ NEW were added in this revision to give the pack a long-run technological chronology and to broaden it from tools alone into the botanical and ecological knowledge that toolmaking depended on.

Source 1: Africa in the Iron Age c. 500 B.C. to A.D. 1400 (1975) ★ NEW

ACCESSION: AA-ARC-0007 | TYPE: Archaeological synthesis | AUTHORS: Roland Oliver and Brian M. Fagan

Situates individual tools within a continental technological chronology — iron production, metallurgy, agricultural technology and regional exchange — rather than treating each object in isolation. Sets the frame for every source that follows.

Oliver, Roland, and Brian M. Fagan. 1975. *Africa in the Iron Age c. 500 B.C. to A.D. 1400*. Cambridge University Press. Abantu Archives, accession AA-ARC-0007.

STUDENT ACTIVITY

Identify one long-term technological change the authors describe.

CRITICAL QUESTION

How does archaeology's long timescale change how you read the individual, undated-feeling tools in the sources that follow?

Source 2: The Bundu Book of Geology, Gemmology and Archaeology (1968)

ACCESSION: AA-WEB-0061 | TYPE: Technical guide | AUTHORS: Dr K. A. Viewing, J. W. Sweeney, and P. S. Garlake

A technical guide on how early craftspeople used local minerals and stone.

Viewing, K. A., J. W. Sweeney, and P. S. Garlake. 1968. *The Bundu Book of Geology, Gemmology and Archaeology*. Abantu Archives, accession AA-WEB-0061.

STUDENT ACTIVITY

List the types of stone found in your local area or regional geological survey.

CRITICAL QUESTION

Which stone properties were needed to make sharp axes and scrapers before iron arrived?

Source 3: African Background: Culture of the Shona Speaking People (1965)

`ACCESSION: AA-WEB-0131 | TYPE: Ethnographic study | AUTHOR: Michael Gelfand`

An ethnographic study of daily Shona tools, focusing on grinding stones (guyo) and winnowing baskets (rutsero).

Gelfand, Michael. 1965. *African Background: The Traditional Culture of the Shona Speaking People*. Abantu Archives, accession AA-WEB-0131.

STUDENT ACTIVITY

Study the drawings and dimensions of traditional grain processing tools.

CRITICAL QUESTION

How did the shape of grinding stones and winnowing baskets solve daily food processing tasks?

Source 4: Gathering Among Woodland Savannah Cultivators: A Case Study, the Gwembe Tonga (1971) ★ NEW

`ACCESSION: AA-WEB-0123 | TYPE: Anthropological case study | AUTHOR: Thayer Scudder`

A second ethnographic case study, this time of the Gwembe Tonga rather than the Shona — introduces environmental adaptation and indigenous ecological knowledge in gathering, not just made tools.

Scudder, Thayer. 1971. *Gathering Among Woodland Savannah Cultivators: A Case Study, the Gwembe Tonga*. Zambian Papers No. 5, University of Zambia Institute for African Studies. Abantu Archives, accession AA-WEB-0123.

STUDENT ACTIVITY

Identify one gathered resource and the ecological knowledge needed to find and use it.

CRITICAL QUESTION

Compare Source 3 and Source 4. How does an economy based on gathering shape different knowledge from one based on grain processing?

Source 5: Witch Doctor: Traditional Medicine Man of Rhodesia (1964)

`ACCESSION: AA-WEB-0085 | TYPE: Ethnographic account | AUTHOR: Michael Gelfand`

An account showing how traditional healers shaped wood, bark, and horn into medical tools.

Gelfand, Michael. 1964. *Witch Doctor: Traditional Medicine Man of Rhodesia*. Abantu Archives, accession AA-WEB-0085.

STUDENT ACTIVITY

Name two tools used in traditional medicine preparation.

CRITICAL QUESTION

How do these tools show that healers held a deep understanding of local ecology?

Source 6: The Material Culture of Zimbabwe (1981)

`ACCESSION: AA-ARC-0051 | TYPE: Survey/reference | AUTHOR: H. Ellert`

A direct survey of Zimbabwean tools, weapons, and household objects made before and during colonial rule.

Ellert, H. 1981. *The Material Culture of Zimbabwe*. Abantu Archives, accession AA-ARC-0051.

STUDENT ACTIVITY

Group Ellert's tools into categories by raw material (stone, wood, iron, clay).

CRITICAL QUESTION

How does grouping tools by material show how technology changed over time?

Source 7: Traditional Living in Zimbabwe (1982)

`ACCESSION: AA-BK-0171 | TYPE: Craft/heritage account | AUTHOR: Mary Forrest`

Describes building methods and craft displays at the Victoria Falls Craft Village.

Forrest, Mary. 1982. *Traditional Living in Zimbabwe*. Modus Publications, Harare. Abantu Archives, accession AA-BK-0171.

STUDENT ACTIVITY

Identify one building method or craft technique documented in the text.

CRITICAL QUESTION

What is gained and lost when traditional skills move from daily use to museum displays?

Source 8: Useful Plants of Nyasaland (1955) ★ NEW

`ACCESSION: AA-BK-0192 | TYPE: Botanical/government survey | AUTHOR: Jessie Williamson (ed. P. J. Greenway)`

Broadens the pack's plant knowledge from dye alone (Source 10) into food, medicine and materials — a government-commissioned survey of what plants were actually used for across Nyasaland.

Williamson, Jessie. 1955. *Useful Plants of Nyasaland*. Ed. P. J. Greenway. The Government Printer, Zomba, Nyasaland. Abantu Archives, accession AA-BK-0192.

STUDENT ACTIVITY

Identify one plant and the practical use recorded for it — food, medicine, or material.

CRITICAL QUESTION

What does a government-commissioned plant survey reveal about which indigenous knowledge colonial administrations found worth recording?

Source 9: Poisonous Plants of Rhodesia (1956) ★ NEW

`ACCESSION: AA-ARC-0089 | TYPE: Botanical/scientific reference | AUTHORS: D. K. Shone and R. B. Drummond`

The necessary counterpart to Source 8: indigenous plant knowledge also meant knowing what to avoid — classification, risk management and a practical chemistry of survival.

Shone, D. K., and R. B. Drummond. 1956. *Poisonous Plants of Rhodesia*. Abantu Archives, accession AA-ARC-0089.

STUDENT ACTIVITY

Identify one plant described and the danger it poses.

CRITICAL QUESTION

Why does classifying dangerous plants require just as much systematic knowledge as classifying useful ones?

Source 10: Dyeing With Plants in Zimbabwe (1988)

`ACCESSION: AA-WEB-0059 | TYPE: Practical handbook | COMPILER: Ilse Noy (ZIMFEP)`

A handbook detailing how to extract dyes from local plants to colour cloth and fibres.

Noy, Ilse, comp. 1988. *Dyeing With Plants in Zimbabwe*. ZIMFEP, Harare. Abantu Archives, accession AA-WEB-0059.

STUDENT ACTIVITY

List two plants used for dyeing and write down the colours they produce.

CRITICAL QUESTION

Why does plant dyeing count as practical chemical technology alongside toolmaking?

Source 11: Art and Craft Introductory Booklet for Primary Teachers (1985)

`ACCESSION: AA-WEB-0196 | TYPE: Curriculum booklet | PUBLISHER: Ministry of Education & Culture`

A post-independence curriculum booklet showing how schools formalised craft skills.

Ministry of Education & Culture. 1985. *Art and Craft Introductory Booklet for Primary School Teachers*. Abantu Archives, accession AA-WEB-0196.

STUDENT ACTIVITY

Outline one craft activity that the booklet recommends for classroom work.

CRITICAL QUESTION

How does this 1985 lesson plan compare with your current school project?

Source 12: Rhodesian Botanical Dictionary of African and English Plant Names (1972)

`ACCESSION: AA-BK-0259 | TYPE: Reference dictionary | AUTHORS: H. Wild, revised by H. M. Biegel and Stephen Mavi`

A reference dictionary matching Shona and Ndebele plant names with scientific terms.

Wild, H., H. M. Biegel, and S. Mavi. 1972. *Rhodesian Botanical Dictionary of African and English Plant Names*. DRSS. Abantu Archives, accession AA-BK-0259.

STUDENT ACTIVITY

Look up the Shona or Ndebele name of a plant cited in Source 5, 8 or 9.

CRITICAL QUESTION

Why did the authors argue in their preface that recording indigenous plant names was urgent?

Source 13: Community Arts and the Question of Culture in Harare (1989)

`ACCESSION: AA-BK-0252 | TYPE: Policy paper | AUTHOR: Ngugi wa Mirii`

A policy paper examining how traditional skills fit into modern urban cultural policy.

Ngugi wa Mirii. 1989. *Community Arts and the Question of Culture in the City of Harare*. ZIMFEP, Harare. Abantu Archives, accession AA-BK-0252.

STUDENT ACTIVITY

Identify one policy step that the author suggests to support community art.

CRITICAL QUESTION

How does this 1989 argument link traditional crafts to modern national identity?

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4. Differentiated project deliverables

Track A: Physical model & technical report

Build a model of one traditional tool using local materials (clay, wire, timber, fibre).

Requirement: write a one-page report on its importance, citing Source 6 or Source 12.

Track B: Digital CAD model & portfolio

Create a 3D digital model or blueprint of a tool using Tinkercad or vector tools.

Requirement: write an analytical report evaluating tool efficiency, citing Source 6 and Source 10 or 12.

Adult learner & diaspora extension module — industrial policy essay

Write a 500-word essay examining how indigenous knowledge in toolmaking and plant chemistry can support sustainable manufacturing in Zimbabwe today. Draw upon arguments from Source 10 (Noy) and Source 13 (Ngugi wa Mirii), and situate your argument within the long technological chronology set out in Source 1.

5. Source criticism protocol

Students should identify the author/institution, date, intended audience, purpose, and what the source leaves out. Do not treat later histories, reprints, cataloguing profiles or retrospective studies as eyewitness evidence merely because they discuss an earlier event.

6. Catalogue accessions used

AA-ARC-0007	AA-WEB-0061	AA-WEB-0131
AA-WEB-0123	AA-WEB-0085	AA-ARC-0051
AA-BK-0171	AA-BK-0192	AA-ARC-0089
AA-WEB-0059	AA-WEB-0196	AA-BK-0259
AA-BK-0252		

Editorial note: Catalogue descriptions are finding-aid information. Teachers and researchers should consult the actual item where possible and distinguish the catalogue record from the historical source itself.