Utilising the Stone Age for Sport Historical Teaching

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Abstract

In this article the author explored sport history pedagogy by combining the Canadian Benchmarking Project with the Revised Bloom's Taxonomy (RBT) for teaching ancient culture to undergraduate students of sport history. The article was introduced by presenting some common understanding of what constitutes the subject, sport history and explaining what pedagogical tools teachers can employ to counter the antagonism that students generally display towards the subject. It was argued that these tools are best utilised by identifying three domains of learning and teaching (cognitive, affective and physcomotor) in sport history. The researcher chose the Stone Age period as a topic of research and class presentation. Next, a narrative was created about this period, placing it within world context. Then the narrative was converted into pedagogical assessment experiences by using the RBT for use inside and outside the classroom but within the boundaries of the formal university sport history curriculum. Finally, the assessment experiences were summarised after a third year sport history class completed them.

Keywords: Bloom's Revised Taxonomy; Canadian Benchmarking Project; Stone Age; Sport history; Stellenbosch.

Introduction

Sport history as a subject discipline uses the term, “sport” relative to all physical activities of humankind (Van der Merwe, 1999:xii). The quest for survival during ancient times was in some ways facilitated by a desire to play. A Dutch philosopher who immersed himself in understanding the play element in human nature, Johan Huizinga, claimed that play is a cultural activity (Huizinga, 1933:5). It is arguable then that the human race evolved culturally because in part, the ability to adapt to our surrounding was facilitated by the playful characteristic manifest in human nature (Estes & Mechikoff, 2002:23). This knowledge is useful for lecturers of undergraduate sport history...
students who generally display an antagonism towards the discipline and often demonstrate a general dislike in studying ancient civilisations (Hart, 1976: V-1; Van der Merwe, 1999:xii). The lack of interest is not only evident amongst undergraduate students but is also absent from the official school curriculum (Department of Basic Education, 2011a; Department of Basic Education, 2011b). This confirms Hamilton, et al.’s suggestion that “the ways in which indigenous societies themselves produced … knowledge, before the advent of literate recorders, is a topic little treated in its own right by historians…” (Hamilton, et al.: 4). Therefore there is a persistent practice of referring to the Bushmen¹ people as “the first people of the Cape” (Thompson & Wilson, 1982:41). This idea ignores the possibility of any human endeavour, before the arrival of Bushmen in the Western Cape, as worthy of historical enquiry.

In the lecture hall setting, this lack of interest may be ascribed to situations where students of sport history are usually only stimulated in the cognitive domain of learning. Very little attention is devoted to the stimulation of the affective (feeling) and physcomotor (movement) domains. The affective domain implies showing empathy for the concerns and limitations of fellow students (and human beings) and demonstrating a willingness to participate with them regardless of diversity or disability. Physcomotor domain development emphasise efficient movement by using a variety of activities that develop locomotor skills such as walking, running, skipping and hopping. It also refers to performing body management skills on various apparatus including climbing ropes, benches and balance beams (Beighe & Pangrazi, 2011:65). These activities imitate human movement patterns that Stone Age people used for daily living. This research utilised this information and created a narrative of ancient sport practices in pre-colonial “Stellenbosch” and then presented it as a teaching and learning experience at undergraduate level. The study therefore attempts to convert historical knowledge into pedagogical communication (Van Eeden, 2012:31). An attempted aim of such communication is two-fold: to provide context for exiting narratives on Stone Age sport history and to help students create new narratives about the past (Booth, 2005:202). A further aim of this work was to add to a growing interest in themes of decolonisation.

A way of describing the methodology for gathering teaching and learning materials for this research exercise is that it chose to recover a sport history of Stellenbosch that those in positions of power (past and present) removed

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¹ The term, Bushman, instead of San is used in this text in response to the growing rejection of the latter by political activists who prefer the Afrikaans reference of Boesman.
from public discourse. General works of this nature include the publications, *Stellenbosch Drie Eeue* (*Stellenbosch Three Centuries*) and *Stellenbosch, 1679* (Smuts, 1979:51; Anonymous, 1929:135). Both works honed in on human occupation of Stellenbosch from 1679 onwards but ignored any previous accounts of human habitation. Some historical accounts make brief reference about ancient inhabitants of “Stellenbosch” but ignores Stone Age people. In this respect the work, *Nog altyd hier gewees*, makes references to the ancient Bushmen and Khoi people in only eight lines (Giliomee, 2007:1). The research undertaken in this study attempted to interrupt this trend and place ancient sport historical accounts of “Stellenbosch” within a community and global context. Indeed, the practice of studying the cultural life of ancient societies in the South Western Cape through narrow nationalistic lenses has run its course. As such, this research may be seen as an extension of the work of Floris van der Merwe, who explored sport practices of Stone Age people (Van der Merwe, 1999: 1-8; Van der Merwe, 2007:1-4). In order to convert these texts into sport history teaching and learning material, the Canadian Benchmarks of Historical Thinking (CBHT) framework was utilised.

**Benchmarking sport history through techniques and approaches**

As a way for sport historians to proceed with teaching sport in the stone age period, it was necessary to explore questions about approaches and techniques to their subject (Booth, 2005:5). The technique employed by this research, was the manipulation of language. It is the conviction of this researcher that the core duty of the historian is to uncover, expose and re-interpret stories. In order to achieve this, the teacher of history should be able to provide students with pedagogic tools to make sense of stories. A history teacher should also recognise that the foundation of these pedagogic tools is the utilisation of language in historical texts. The America philosopher, Richard Rorty, alerted historians to the limitations of textual analysis as independent avenues to discovering the past. He urged historians [and by implication history teachers] to look beyond the textual in order to break the myth of language as a mirror of reality (Booth, 2005:202).

The approach this research utilised was to help students relate historical complexities and lesser known legacies of the distant past with modern day entanglements. By expanding the six concepts of historical thinking as outlined in *The Canadian Benchmarks of Historical Thinking* (CBHT) this research paper provided pedagogical tools for Higher Education practitioners.
who intend using sport history for facilitating historical discourse. The CBHT categorised Historical Thinking into six concepts: (a) historical significance, (b) evidence, (c) continuity and change, (d) cause and consequence, (e) historical perspectives, and (f) moral dimension (Peck & Seixas, 2008:1017, 1024). These categories, as pedagogic tools, are best used if there is a “good story”. A “good story” is a narrative created with connections between facts that turn incoherent chronicles into meaningful discourses (Hammarlund, 2012:119). However, the CBHT has limitations in helping teachers of history with assessment. Therefore, Bloom’s Revised Taxonomy (BRT) could be utilised to assist teachers to create assessment rubrics (See Appendix 1). All history teaching however, as mentioned previously, needs a story and therefore it is necessary to construct a sport historical narrative.

Creating a Stellenbosch stone age sport history narrative

Although there is a gap in the recorded sport history of Stellenbosch prior to colonial settlement, it does not mean an absence. There is evidence to suggest that the Western Cape was inhabited for many thousands of years, first by Stone Age humankind, later by Bushmen and still later by Khoisan tribes (McDonald, 1983:4). This presents historians with an opportunity of creating narratives that could be converted into teaching experiences.

Present day knowledge of Stone Age and ‘sport’ in Stellenbosch

The term, Stone Age, was coined in the late 19th century by the scholar Christian J Thomsen, who came up with a framework for the study of the human past, known as the Three Age System. This framing is not without polemical substance. The basis of this framework is technological since it revolves around the notion of three successive periods or ages: Stone Age, Bronze Age, and Iron Age, each age being technologically more complex than the one before it. This Three Age System has limitations for understanding sport history because it has little meaning when applied outside Europe. It formed a basis for anthropologists to conclude that sport development took place on levels from simple practices in the early stages of human development through to the last stage where features such as elaborate playing fields and equipment, professionalism, spectator sport and class distinctions between organisations determine participation (Bressan & Van der Merwe, 1992:10-11). The implications of this developmental model is that modern sport, with all it’s controversies surrounding bribery, drug abuse and excessive violence,
is more advanced than primitive pastimes. Also, the concept of stones being
the first sport implements in human history has not been left unchallenged
by historians. The archaeologist, Åke Svahn also postulated that the branch of
a tree and not a stone was man’s first weapon (Van der Merwe, 2007:1). An
inherent limitation of the Stone-Bronze and Iron Age continuum is the idea
that these were levels of progression.

Despite these criticisms, this system is still largely used today and, although it
has limitations, it can be helpful as long as we remember that it is a simplified
framework. John Goodwin and Peter van Riet Lowe divided the Stone Age
into three main stages in 1929:

- The **Earlier Stone Age** in Southern Africa dates from about 1.8 million years
  ago to about 250 000 years.
- The **Middle Stone Age** dates from about 250 000 to about 25 000 years ago.
- The **Later Stone Age** dates from about 25 000 years ago to within the last few
  hundred years of human existence (Giliomee & Mbenga, 2007:13).

Although not easily recognisable by modern day students, these periods hold
opportunity for classroom pedagogy in sport history. Contemporary sport
practices reflect certain positive assumptions made by historians regarding the
Stone Age period. Stone Age people hunted for food as individuals but also
found it effective to form groups and hunt as a team. Perhaps the individual
that stood out as the best hunter was admired by those around him for his
skill and bravery. It might also be that the activities that served to make one a
better hunter were in all probability playful activities that emulated hunting.
Over time, the desire to survive, to compete for honour and to claim victory
has become a part of culture and is symbolised in many ways through games
and sport (Estes & Mechikoff, 2002: 23-24). Lecturers of sport history can
use this information for generating pedagogical experiences.

**Exploring the Stone Age periods as ancient Stellenbosch sport culture**

The Western Cape has a number of important Stone Age sites, stretching
from Elands Bay on the West Coast to Cape St Francis on the South Coast
(Mountain, 2003:16). Places with good quality rocks, such as the banks of the
Eerste River in Stellenbosch, were used by Stone Age people as quarries for
raw materials for stone tools (Giliomee & Mbenga, 2007:13). The removal of
flakes from a stone core, called the Oldowan technology, was the minimum
requirement for the stone to function as a tool (Mountain, 2003:11).

According to Louis Péringuey, an archaeologist, there was human activity in the present Stellenbosch area, about 250 000 years ago during the Earlier Stone Age period. Péringuey’s finds were made at a site, today called Bosman’s Crossing, named after the railway station situated nearby. The site was located at:

... the foot of a steep hill called Pappegaaiberg (Parrot mountain) where a small rivulet - a tributary of the Eerste River, runs. The spur of the hill abuts on that rivulet and is intersected on one side by a cart road and by a railway cutting on the other. The space thus left has been used for a good many years as a brick field … the great accumulation of this brick clay is in itself a proof of great antiquity (Seddon, 1966:133).

Péringuey’s find led to the use of the term ‘Stellenbosch Culture’ to describe bifocal tools of the Earlier Stone Age period but has since been replaced by the international term, ‘Acheulian’, derived from the archaeological site of St Acheul in France (Mountain, 2003:12). Archaeologists under, J.D. Seddon, from the University of Cape Town, carried out excavation tests in Stellenbosch in 1965 and after finding artefacts resembling an early Stone Age assemblage, he reported that:

... the hills around there are littered with the artefactual remnants of the camping places of early man at almost all heights above the Plankenberg River … in very few places are these artefacts in any sort of context and dating … impossible. The only place where numerous artefacts are found… is opposite the… Bosman’s Crossing site (Seddon, 1966:133).

Image 1: The place where Louis Péringuey unearthed stone tools from the “Stone Age” period. It was declared a provincial heritage site and commemorated with copper plates of the National Monuments Council
The place where Louis Péringuey drew his conclusions was declared a provincial heritage site with a stone monument (Mountain, 2003:12). However, Simon Haw, a retired history subject advisor, asserts that “most monuments and statues tend to blend into the background and are seldom even noticed much less interrogated by the citizenry busily going about their daily rounds” (Haw, 2010:163). It has also not found a place in the social consciousness of the surrounding communities that happens to be poor. About three kilometres south is a sprawling informal settlement, Khayalitsha and about the same distance north is another, Khayamandi.

The place where Péringuey found stone tools is commemorated in a small archaeological reserve and is a provincial heritage site (Mountain, 2003:12). By 1965 this “brick clay’ was gone and the grass of the Archaeological Reserve, which laid in a triangle between two roads and the Plankenberg River was level with the Main road that ran over the Adam Tas bridge into Stellenbosch (Seddon, 1966:133-134). This site has been vandalised and the plates to commemorate this finding has been removed. Today there is, due to human activity, very little, of the original flora in the valleys and districts of the Early Stone Age period (De Vos, 1979: 27). This makes it difficult to identify what kind of branches were used for weapons if researchers use Svahn’s theory.

Image 2: Present day (2016) site where Louis Péringuey unearthed Stone Age tools, the Archaeological Reserve. The copper plates have been removed.
Image 3: Present day (2016) site of Bosman's Crossing with signs of neglect around flora

Source: Photo taken by author.

Image 4: The informal housing settlement of Khayelitsha about five kilometres to the south of Bosman's Crossing

Source: Photo taken by author.
Historians claim that many human movement activities at Bosman’s Crossing were similar to those practiced elsewhere in the world. Hand-axes found in India, the Thames Valley in England and in Stellenbosch are almost identical (Giliomee & Mbenga, 2007:14).

Although no archaeological finds exist in the present day Stellenbosch about the Middle Stone Age (MSA) period, evidence of human existence was found on a farm, Elandsfontein near Hopefield in 1953, 120 kilometres North-West of the present town. This unearthing showed similarities with archaeological findings made in 1921 in Kabwe, Zambia (Tobias, 1986:22). Findings were also made at Fishoek, some 50 kilometres south-west of Stellenbosch (Tobias, 1986:15). Therefore generalisations about human movement (sport) activity in Stellenbosch, as representative of sport practices in the Western Cape, can be made with some certainty.

This period, (MSA) marked a fundamental change in the techniques of stone tool-making. Hand-axes were replaced with much smaller and thinner flakes that had been carefully shaped before they were struck from the core. It is believed that MSA people developed a lifestyle and level of human consciousness similar to that of modern people (Giliomee & Mbenga, 2007:14). Tools ranged between forty and a hundred millimetres in length. During this time people increasingly used caves and rock shelters for habitation. Although plants constituted the bulk of their diet, there is enough evidence to suggest that the hunting of game also took place (Mountain, 2003:13-14).

Research undertaken at various Later Stone Age (LSA) midden sites, including Matjies River Rock Shelter has revealed that the people who created them were ancestral Bushmen (Mountain, 2003:16). The LSA saw several innovations, including items that were still being made by Bushmen hunter gathers at the time of European contact and up to the 20th century (Giliomee & Mbenga, 2007:16). Toolmakers produced smaller stone tools, called microcliths, as well as polished bone artefacts, engraved ostrich eggshell flasks, tortoise shell bowls, bows and arrows and bored stones used as weights for digging sticks (Mountain, 2003:16).
Pedagogical experiences for under graduate students of sport history

Activities

Activity 1 (Continuity and Change) (Physcomotor and cognitive)

Design a treasure hunt map, for tourists, starting at Bosman’s Crossing and terminating at the banks of the Eerste River outside the Coetzenburg athletic stadium. The ‘hunt’ is to be completed within 90 minutes with at least 10 ‘treasures’ to be found. Use visuals in your presentation. The assessment rubric for this activity follows below.

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>Product is marketable</th>
<th>Product is user friendly but not marketable</th>
<th>Product is completed but not very user friendly</th>
<th>Product is completed but sloppy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>Accurate, concise and detailed</th>
<th>A certain measure of accuracy in presentation of sites on map</th>
<th>Attempted but presentation of sites on map is inaccurate</th>
<th>Made some attempt to address the assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Activity 2 (Moral dimension: Evidence) (Affective)

Compose a 1 000 word essay on the following theme: “Manipulating the space around Bosman’s Crossing to create an awareness of the landscape through your knowledge of recreation activities”. You must refer to sources outside the narrative but you must make use of at least one image in the text above. See assessment rubric below.

<table>
<thead>
<tr>
<th></th>
<th>Sophisticated (5)</th>
<th>Competent (3)</th>
<th>Not Yet Competent (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain why and how environmental degradation takes place at the site during the 20th century.</td>
<td></td>
<td></td>
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<tr>
<td>Develop a recreation programme that include three activities.</td>
<td></td>
<td></td>
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<tr>
<td>Explain how the space can be altered to make it environmental friendly for a sport event.</td>
<td></td>
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</tbody>
</table>
Activity 3 (Continuity and Change; Historical significance) (cognitive)

Create a narrative of imaginary experiences in a 1 500 word essay on: “a week of sports in the life of Stone age” people. Use Van der Merwe, (2007: 1-4) as your primary source. Your essay will be marked using the rubric below.

<table>
<thead>
<tr>
<th>Content: Historical research</th>
<th>Excellent (16-20)</th>
<th>Good (12-15)</th>
<th>Average (8-11)</th>
<th>Poor (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows insightful, layered understanding of the issues</td>
<td>Shows understanding of the issues</td>
<td>Describes the issues but shows little or no understanding or insight</td>
<td>Is only able to identify a few or none of the relevant issues; no understanding shown</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding of Stone Age sports history</th>
<th>Excellent (16-20)</th>
<th>Good (12-15)</th>
<th>Average (8-11)</th>
<th>Poor (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulate, accurate and appropriate expression; logical, effective structure</td>
<td>Clear accurate expression (perhaps longwinded); written in paragraphs; shows some logical progression of ideas</td>
<td>Inaccurate or jumbled expression; written in paragraphs with some logical progression of ideas shown</td>
<td>Inaccurate or jumbled expression; no attempt at paragraphs or logical structure</td>
<td></td>
</tr>
</tbody>
</table>

Activity 4 (Historical perspectives) (Cognitive)

Construct a paragraph, of 500 words, on the historical significance of the Stone Age period as a sport history exercise by employing the language of doubt. Use the essay above as source material and extend with further research and use the Harvard method of referencing. See assessment rubric below.

<table>
<thead>
<tr>
<th>Consistent throughout (5)</th>
<th>Consistent with some deviations (3)</th>
<th>Inconsistent (2)</th>
<th>Irrelevant to task (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language of doubt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvard referencing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrative style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammatically correct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neatness in presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Activity 5 (Affective) (Evidence and Moral dimension)

Defend and/or criticise in a 1000 word historical referenced essay that the space around the Peringuey commemoration stone needs to be preserved as a site of memory for sport history. Use Figure 1 – 4 as basis for your arguments and consult at least three different forms of evidence. See assessment rubric below.

<table>
<thead>
<tr>
<th></th>
<th>Consistent throughout</th>
<th>Consistent with deviations</th>
<th>Inconsistent</th>
<th>Irrelevant to task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used three different sources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arguments are source based.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifiable central theme running throughout the narrative.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quoted sources relate to arguments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings and summary

After students handed in their assignment, the author engaged them about the experience to gather information for future classroom practices. The activities were then modified and presented in this study. In some instances, suggestions for future pedagogical activities were made and recorded below.

Most students identified a need for tangible rewards when undertaking a project of this nature. In the case of Stellenbosch University, a suggestion was made that the project could be incorporated into a sportsday event as part of the annual Maties Community Service programme. Students could be rewarded with points on their Green Portfolio. The announcement of the Maties Green Award can be moved to the end of the year which could motivate students. Another suggestion made by a student, for future use, was to design an assessment activity that includes creating a walking trail, similar to snakes and ladders.

Many also relied on a dominant modern narrative that Stone Age people were “wild and barbaric”. At the same time, many tend to agree that there are strong possibilities of Stone Age human activity corresponding to that of modern day sport practices. There also appears to be general agreement
amongst the students that the survival aspect of human activity excluded aspects of enjoyment and voluntary participation. The facilitator could thus raise ethical dimensions of modern sport that questions reasons for modern day professional participation that is characterised by financial corruption, substance abuse, expansive professionalism and performance orientated participation that overrides participation for enjoyment.

A large number of students presented narratives from an adult male perspective. There was no representation (imaginary or referenced) of the elderly, female, disabled or children. A word of caution is needed here, in that students may tend to wander off in a general direction, departing from a sport narrative, if they over-emphasise these groups. A considerable number of students also presented narratives that were historically inaccurate eg. spear throwing and archery as a stone age activity. The facilitator should encourage students not to expend themselves with the imagination at the expense of historical accuracy.

Final remarks

The narrative placed a local history of pre-colonial Stellenbosch in an ancient global context. It attempted to help the “independent-thinking (sport historians) academic to explore his or her local environment and region more intensively to use the local/ regional historical legacy as efficiently as possible in an educational environment” (Van Eeden, 2010:27). Further, this study also showed teaching Stone Age sport history can become “a subject of action and responsibility” (Den Heyer, 2015:9). A realisation of this could act as a stimulus for creating teachable moments with a topic that is otherwise considered meaningless by students. In order to attach meaning to sport during the Stone Age period, it is necessary to move outside normal practices of pedagogy. By combining Bloom’s Revised Taxonomy with the Canadian Benchmarking Project students were coerced into moving from purely cognitive domains of functioning to psychomotor and affective levels of action and reasoning.
References


Huizinga, J 1933. Over de grenzen van spel en Ernst in de cultuur. Rede van den rector magificus, Dr J Huizenga op den driehonderd-achtentwintigsten dies notalis der leidensche universiteit, 8 Februario. Unpublished article.


Appendix 1

*Bloom’s revised taxonomy*

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remembering</td>
<td>Choose, cite, enumerate, group, label, list, listen, locate, match, memorise, name, outline, quote, read, recall, recite, record, relate, repeat, reproduce, review, select, show, sort, state, underline, write</td>
</tr>
<tr>
<td>Understanding</td>
<td>Account for, annotate, associate, classify, convert, define, describe, discuss, estimate, explain, express, identify, indicate, interpret, observe, outline recognise, reorganise, report, research, restate, retell, review, translate</td>
</tr>
<tr>
<td>Applying</td>
<td>Adapt, apply, calculate, change, collect, compute, construct, demonstrate, dramatise, draw, exhibit, generalise illustrate, interpret, interview, make, manipulate, operate, paint, practice, sequence, show, sketch, solve, translate</td>
</tr>
<tr>
<td>Analysing (Critical Thinking)</td>
<td>Analyse, appraise, arrange calculate, categorise, compare, contrast, criticise, debate, detect, diagram, discriminate, dissect, distinguish, examine, experiment, group, infer, inquire, inspect, investigate, order, probe, question, relate, research, scrutinise, separate, sequence, sift, subdivide, summarise, survey, test</td>
</tr>
<tr>
<td>Evaluation (Critical Thinking)</td>
<td>Appraise, argue, assess, choose, compare, conclude, criticise, critique, debate, decide, deduce, defend, determine, differentiate, discriminate, evaluate, infer, judge, justify, measure, predict, prioritise, probe, rank, rate, recommend, revise, score, select, validate, value</td>
</tr>
<tr>
<td>Creating (Critical thinking)</td>
<td>Act, assemble, blend, combine, compile, compose, concord, construct, create, design, develop, devise, formulate, forecast, generate, hypothesise, imagine, invent, organise, originate, predict, plan, prepare, propose, set up</td>
</tr>
</tbody>
</table>
### Affective domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving (Awareness)</td>
<td>Accept, acknowledge, ask, attend, describe, explain, follow, focus, listen, locate, observe, realise, receive, recognise, retain</td>
</tr>
<tr>
<td>Responding (React)</td>
<td>Behave, cite, clarify, comply, contribute, cooperate, discuss, examine, follow, interpret, model, perform, present, question, react, respond, show, study</td>
</tr>
<tr>
<td>Valuing (Comprehend and act)</td>
<td>Accept, adapt, argue, balance, challenge, choose, confront, criticise, debate, differentiate, defend, influence, justify, persuade, prefer, recognise, refute, seek value</td>
</tr>
<tr>
<td>Organising (Personal value system)</td>
<td>Adapt, adjust, alter, arrange, build, change, compare, contrast, customise, develop, formulate improve, manipulate, modify, practice, prioritise, reconcile, relate, revise</td>
</tr>
<tr>
<td>Internalising (Adopt behavior)</td>
<td>Act, authenticate, characterise, defend, display, embody, habituate, influence, internalise, practice, produce, represent, solve, validate, verify</td>
</tr>
</tbody>
</table>

### Psychomotor domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing (Awareness)</td>
<td>Hear, identify, notice, observe, see, smell, taste, touch, watch, walk</td>
</tr>
<tr>
<td>Modelling (Copy)</td>
<td>Adhere, attempt, copy, follow, imitate, mimic, model, reenact, re-create, repeat, replicate, reproduce, show, try</td>
</tr>
<tr>
<td>Recognising standards (Follow instructions)</td>
<td>Build, check, demonstrate, detect, discriminate, differentiate, distinguish, execute, implement, notice, perceive, perform, recognise, select</td>
</tr>
<tr>
<td>Correcting (Develop precision)</td>
<td>Adjust, alter, calibrate, change, complete, construct, correct, customise, improve, integrate, manipulate, modify, practice, revise</td>
</tr>
<tr>
<td>Articulating (Combine &amp; integrate related skills)</td>
<td>Adapt, build, combine, compose, construct, coordinate, create, develop, formulate, integrate, master, originate, produce, solve</td>
</tr>
<tr>
<td>Naturalization (Automate &amp; master)</td>
<td>Demonstrate, design, exhibit, illustrate, invent, instruct, manage, re-design, specify, teach, train, troubleshoot</td>
</tr>
</tbody>
</table>
Appendix 2

*Canadian Benchmarking Historical Project*

**Historical significance**

This aspect refers to historical data that results in change (the event had deep consequences, for many people, over a long period of time) and is revealing (the event sheds light on enduring or emerging issues in history and contemporary life or was important at some stage in history within the collective memory of groups). Significant topics might meet either of these criteria but not necessarily both (Peck & Seixas, 2008:1027).

**Evidence**

This aspect refers to the use of a wide range of evidence that include archival material, academic literature, books, memory recollection, newspapers and visual material. The framers of the Canadian Benchmarks of Historical Thinking Project emphasised the importance of being selective when using evidence (Seixas, nd).

**Continuity and change**

This aspect of historical thinking seeks answers for the question: “What has changed and what has remained over time”? (Seixas, nd).

**Cause and consequence**

The concept of cause and consequence helps historians understand how and why certain conditions and actions led to others (Seixas, nd).

**Historical perspectives**

The Canadian Benchmarks of Historical Thinking Project explains the developing of historical perspectives as understanding the “past as a foreign country” with different social, cultural, intellectual and emotional contexts that shaped people’s lives and actions (Seixas, nd).

**Moral dimension**

This concept deals with how historians interpret and write about the past. It also relates to how different interpretations of the past reflect different moral stances today (Seixas, nd).