Notes for Contributors and Invitation for Papers

The *Journal of Geography Education for Southern Africa (JoGESA)* is a blind, double peer-reviewed journal. Articles submitted to JoGESA are reviewed anonymously by a minimum of two expert reviewers. The Editorial Board selects articles and book & teaching resources reviews based on the outcome of the review process and then ratified by the editor(s). **Authors of articles are sent guidelines for their final submission.** Only Conference Reports, Travel Blogs and Eulogies are not refereed but will be reviewed by the editorial board. This eJournal is designed to encourage the continued professional growth and support of existing Geography Teachers and student teachers in-training, in Southern Africa. To build up the importance of Geography as a globally relevant subject within schools across Southern Africa and the World; and to improve the stature of the role of secondary geography education in relation to the study options available at tertiary level, on the African continent, as well as globally. The ISSN for JoGESA is ISSN 2517-9861.

- We invite your participation in producing this journal. JoGESA encourages school teachers; student teachers; university lecturers or Geography methodologists; Subject Advisors or any Geography Experts, and all others interested in geography to share their ideas and experiences in order to promote sound practices, innovative strategies, modern developments and reflection in geography teaching and learning, as well as sharing their research – to submit articles or contributions for possible publication.
- Contributions of varying length are invited, with a maximum of **8000 words MAXIMUM** for academic articles and research reports (including References).
- Shorter articles of **2000 words**, on best practice (particularly GIS) and classroom strategies, classroom discipline and management, reflections on particular issues and practices in geography teaching and learning, in-service education or workshops, conferences, reports and comments on previous published articles or contributions are welcome.
- Lesson plans; teaching units and how-to-do-it advice on classroom and fieldwork activities; a travel blog; and eulogies are also invited, of no more than **2000 words**, as long as they have relevance for a broad range of teachers across Southern Africa.

**Presenting your article/contribution**

**Email:** Please submit your article/contribution for review to the Editor(s) (address below). **Please send as a Microsoft Word document.**

**Word Processing:** Manuscripts should be word processed and double-spaced, with margins of 2.5cm on all sides, using 12 point size of Times New Roman font.

**Title Page:** The title of the article/contribution, the name & surname, work position or affiliation, email address of the author, and an abstract of **no more than 150 words** should be provided on the title page.

**Headings:** Major and minor sub-headings should be used to guide the reader and to break up the text.
Paragraphs: Paragraphs should start without indentation and should be separated by blank lines. All text should be justified.

Quotations: These should be kept to a minimum and where over 40 words should be indented and justified. These must be appropriately referenced.

End/footnotes: These should be avoided if possible.

References: Authors are requested to cite in-text and to use the American Psychological Association (APA) referencing style, in the reference list, see an exemplar at: http://www.apastyle.org/index.aspx. All references, including internet sources, should be provided in alphabetical order on a separate sheet. The titles of books and journals should not be abbreviated.

Tables & Figures: All tables and figures should be submitted on a separate sheet of paper but their position indicated in text by leaving a 3cm space above and below, inserting the words “Figure X – here” or “Table X – here”. All tables and figures (including maps, diagrams and photographs) should be submitted with captions and be clearly numbered, typed and left justified, below the diagram.

Reproduction: Illustrations and photographs will be reproduced in colour, thus need to be of a high printable quality. Electronic media such as jpeg and gif files should be emailed to the Editor(s).

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Submitting your Article/ Contribution

- JoGESa is published bi-annually (April and September). As at least 2 months are needed for reviewing, another month for editing, design, typesetting and printing – articles should reach the Editor by 1st December (for April issue) and 1st May (for September issue), every year.
- Manuscripts for review, possible publication and all correspondence relating to articles should be sent to: Clinton van der Merwe, Editor, JoGESa, PO Box 522, WITS, 2050, South Africa. Email: clinton.vandermerwe@wits.ac.za.
- Reviews of books, textbooks, kits, any Geography Teaching Resources, websites, electronic and other media, reports, travel blogs and eulogies should be sent to Pam Esterhuysen. Email: esterh2@telkomsa.net.
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JoGESa welcomes advertisements for quality publications, Map and GIS companies, environmental centres, and other services or LTSM relevant to geography teaching. Placement of two consecutive adverts will qualify for 50% discount on the second advertisement. The page sizes and rates are:

**Full page** 180mm horizontal x 260mm vertical  R1000.00

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**Note:** Camera-ready artwork (JPEG, TIFF or PNG format) should be sent to the Editor(s) by: 1st December or 1st May, annually. For further information please visit our website:

www.sagta.org.za
SAGTA Eastern Cape Conference 13 - 18th September 2016

PROGRAMME OF ACTIVITIES

TUESDAY 13th
Delegates arrive & registration, Blue Lagoon Hotel www.bluelagoonhotel.co.za
19h00 – Opening dinner & Guest speaker

WEDNESDAY 14th
07h30 – Depart in Sprinters for West Bank/Coastal study areas
08h00 – GROUP 1/2 – Mercedes Benz factory tour (Rated one of best in world)
GROUP 3/4 – IDZ tour: fish farm
10h00 – GROUP 1/2 – IDZ tour: fish farm
GROUP 3/4 – Mercedes Benz Factory tour
12h30 – Fish ’n Chips (Buffalo River)
14h00 – Field trip: Pineapple farm (Gxulu) & tomato tunnels
16h00 – At leisure
19h00 – Supper – Blue Lagoon Hotel
Chill out or night tour of Mdantsane (shabeen tour)

THURSDAY 15th
08h00 – Coastal geomorphology walk, Bat’s Cave area
10h00 – Eco-walk most southerly mangrove swamps in SA
(May be broken into two groups for each walk)

12h30 - Pack lunch en-route to Hogsback: book into accommodation for night
(two options available: backpackers 44 beds www.awaywiththefairies.co.za &
standard personalized hotel for rest of delegates www.kingslodghogsback.co.za)

Do one/two forest walks... at leisure; Talk on "Fracking in the Karoo region";
Dinner at own expense at various eateries in quaint village and a night walk

FRIDAY 16th
08h30 – Depart in Sprinters for Mpekweni Resort
11h00 – Attend morning session of ASGISA regional conference
Lunch & 2nd session on Geography & GIS
15h00 – Depart for Ccfani Holiday Resort www.ccfani.co.za

SATURDAY 17th
08h30 – Depart in Sprinters Lilyfontein
- Talk on how to become a Green School
- Recycling plant
- Fieldwork in school playground: various options
12h00 – Visit abalone farm & brewery for light lunch
14h00 – Walk the cliffs between Double Mouth & Morgan’s Bay (Uplift &
rejuvenation evident in the E.Cape)
19h00 – Dinner, closing talk

SUNDAY 18th
Pack up & depart via an Outdoor Educational Centre with Game Drive
JoGESAs published bi-annually and is distributed to all members of SAGTA. The aims of the journal are to:

- encourage the continued professional growth and support of existing Geography Teachers and student teachers in-training in Southern Africa.
- to build up the importance of Geography as a globally relevant subject within schools across Southern Africa and the World.
- improve the stature of the role of secondary geography education in relation to the study options available at tertiary level, on the African continent, as well as globally.

Review
JoGESAs is a refereed journal. Articles or contributions submitted to JoGESA for consideration are reviewed anonymously by a minimum of TWO reviewers from the list below (or sent to someone on our Journal Advisory Committee, as necessary). Articles/ contributions are selected by the editor(s) based on the outcome of the anonymous reviews and ratified by the Editorial Board. Authors of accepted articles/ contributions are sent guidelines for their final submission.

Become a member of SAGTA:
Membership Type: Individual, SAGTA / EIS-AFRICA / AAG Joint Membership - (R700 / 2 years, R350 / 1 year). Retired teachers, SAGTA / EIS-AFRICA / AAG Joint Membership - (R440 / 2 years, R220 / 1 year). Student teachers, SAGTA / EIS-AFRICA / AAG Joint Membership - (R440 / 2 years, R220 / 1 year). Non-profit / Academic Institutional Membership (max. 4 staff members) - (R2000 / 2 years, R1000 / 1 year). Corporate Institutional Membership (R4000 / 2 years, R2000 / 1 year).

Visit our website to join SAGTA – online / print an application form at: www.sagta.org.za

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SAGTA is willing to co-fund a visitorship of a SAGTA member, a Geography Teacher who would be willing to present a paper at the Boston, 2017 conference.

Requirements:

1. Write a proposal to apply for the R15K co-funding – your conference fee & flight(s)
2. Accommodation & subsistence at your own cost
3. Have an abstract accepted and present a paper at the AAG:
   http://www.aag.org/cs/annualmeeting
4. Present your paper at the SAGTA conference in 2018.
5. Write up your paper for possible publication in JoGESA.

Contact: Sandra Allen (sandra@sagta.org.za)

Applications close: 1 December 2016

SAGTA 2016 Conference
East London, 13th to 18th September 2016.

Contact:
Llewellyn King
(Merrifield Preparatory School & College)
llowellynkg@gmail.com or
Tania Lentz
(Stirling High School)
lentzt@stirlinghs.co.za
Editorial

Welcome to SAGTA and our Inaugural Issue of JoGESA!

Welcome to the first edition of our eJournal for the Southern African Geography Teachers’ Association (SAGTA), called the Journal of Geography Education for Southern Africa (JoGESA). We are in the process of working towards Department of Higher Education and Training (DHET) accreditation for this journal – but that requires that we consistently publish TWO issues for the next three years (2016 – 2018), before we can apply for accreditation. Once a journal accredited, it means that the academic institution where the published writer who is based, earns the Higher Education Institution (HEI) a subsidy from the DHET for the production of new knowledge. All academics are encouraged to publish their research and are incentivised to submit to accredited journals only. For this reason we aim to work towards accreditation – so that we can get world-class Geography Education research being published in JoGESA.

Thank you to all the people that have voluntarily joined our editorial board, and for those having given of their time to blind peer review submissions for the journal. To the many people that have willingly joined our Journal Advisory Committee, and for also blind peer reviewing and giving feedback on submissions, thank you and welcome aboard! Anyone interested in joining the advisory committee are encouraged to send a CV (a template is available) – please email me at: clinton.vandermerwe@wits.ac.za to be considered. We also welcome any institution that would like to advertise any Geographical Learning, Teaching and Support Material (LTSM) be it in whatever form – in our eJournal (see the rates on page 3). This first edition has some exciting organisations showcasing some of their prestigious and very useful teaching resources.

Thank you for the many submissions we received – please keep sending your contributions for review. In this first edition we learn of the role and value SAGTA and JoGESA can play in advancing Geography Education in Southern Africa and further afield. The importance and professional value of ‘lesson visits or observation’ by senior members of staff or mentors, and how this can develop teachers and grow the Geography teaching profession, as well as two very insightful and exciting mapwork lessons. An exciting game of how to incorporate Atlas work into your Geography teaching is also in this issue. Three reports of some important work in Geography Education can be read in section two. We also mourn the loss of some significant and special Geography teachers during this past year or two. It is important to remember them and share the wonderful contributions they have made to Geography Education and the teaching profession more generally.

Please feel free to contribute to the next edition of our journal – which will be September 2016.

Clinton David van der Merwe
Wits School of Education, Johannesburg
1. Academic Research Papers


Di Wilmot
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Rhodes University, South Africa

Abstract
The purpose of this article is twofold. Firstly, to affirm the establishment of the Southern African Geography Teachers’ Association (SAGTA) and the Journal of Geography Education for Southern Africa (JoGESAA) in 2015, and secondly, to comment on how these two partner organisations can (and should) play a role in strengthening and advancing geography education in South Africa and further afield. The key challenges facing geography education in South Africa are also discussed. These include the strength of its scholarly voice, the state of school geography and teacher education. The article raises key questions and makes some suggestions of how they could be addressed in relation to the work of these two organisations. The insights provided by this article may provide talking points that help to set an agenda for strengthening and enhancing Southern African geography education.

Key words
School geography; professional bodies and networks; scholarly voice; quality education; learning outcomes; geography teacher education; community of practice; best practice

Introduction
The establishment of a professional organisational structure, namely the Southern African Geography Teachers’ Association (SAGTA), can bring together and help to connect members of the geography education community in South Africa, Southern Africa and further afield, the latter through SAGTA’s affiliation to the American Association of Geographers (AAG). Viewed from the perspective of a superstructure that transcends public and independent schools, higher education, and national boundaries, SAGTA may form the hub which connects groupings and networks of geography educators who collaborate in different ways through various fora. These include the biennial ISASA Conference, Napto (Kwa-Zulu Natal), the annual South African Geographical Association conference, and the vibrant geography teachers’ Google Group. SAGTA provides a much needed formalised professional structure in which classroom-based practitioners in the public and independent school sectors, university-based geography teacher educators and researchers, retired teachers and academics, government officials, teachers-in-
training, and non-governmental organisations may collaborate with a common purpose of strengthening and advancing geography education in a developing world South African context. It is argued that SAGTA and its official mouthpiece, the recently established JoGESAs, are at the nexus of a complex, multi-layered, and diverse community of geography educators described above. They can, and should, form the core of an open and expanding system of geography educators. They can also provide a platform for collaborating and sharing ideas and practices.

Geography education in South Africa is characterised by unevenness and huge disparities in: the level at which our learners are performing in relation to national curriculum standards; the teaching and learning methods used in classrooms; resources and learning support materials; teacher knowledge, and teacher resourcefulness. By drawing geography educators together to work as a community of practice with a shared vision and purpose, SAGTA may assist us in addressing the unresolved issue of quality education in school geography. SAGTA and JoGESAs may also be used to support and strengthen the contribution Southern African geography educators are making to international debates about school geography in the 21st century. The journal opens up a new space in which to engage in contemporary debates on the purpose and nature of geography education in a context of complex, multifaceted, global and local environmental challenges. It also provides a platform from which to disseminate the knowledge being generated through research that responds to these and other curriculum challenges. Furthermore, given the recent and current student protest movements taking place at South African universities, the journal may open up a space through the inclusion of ‘points of debate’ articles for conversations on how geography educators are responding to diversity in the curriculum and pedagogy.

The global and national societal context
Southern Africa, like many other parts of the developing world, is dealing with pressing environment and sustainability issues and challenges including climate change, loss of biodiversity and a scarcity of fresh water resources (Lotz-Sisitka, 2011). South Africa faces many social problems and challenges, the most serious of which, according to the findings of a recent survey carried out by the Institute of Race Relations (2016), are unemployment, crime, housing, poor or slow service delivery and corruption. We are dealing with a depressed economy due to the slump in global commodities prices, increasing electricity tariffs, and a weak currency (South African Government. Statement on the Cabinet meeting, 13 January 2016; Rassou, 2015). We are also experiencing the worst drought in living memory, the consequence of which are retrenchment and job losses in the agricultural sector and rising food prices which will push up inflation (Stoddard, 2016). There is a view that 2015 is likely to be the hottest year ever recorded in the world (Kings, 2015). This alerts us to the global socio-ecological crisis we find ourselves in at present and the sustainability challenges at hand (International Social Science Council [ISSC]/ UNESCO, 2013).
Universities are grappling with how to re-orientate education to equip students to deal with this “accelerated change, increasing complexity, ambiguity, controversy and uncertainty both in terms of what is going on and what needs to be done” (Lotz-Sisitka, Wals, Kronlid, McGarry, 2015, p. 74). These authors argue for “a fundamental re-thinking of learning and teaching, and a change to doing things differently rather than doing them better” (ibid., p. 74).

Geography Education: International responses

The need for geography education to respond to education for the environment and sustainability was proclaimed by the International Geographical Union [IGU] Commission on Geographical Education’s Lucerne Declaration on Geographical Education for Sustainable Development in July 2007. The 2016 Charter, produced in November 2015, asserts the following about the contribution of geography to education:

- Geography is a vital subject resource for the 21st century global citizens, enabling us to face questions of what it means to live sustainably in an interdependent world.
- Geographical perspectives help deepen understanding of many contemporary challenges such as climate change, food security, energy choices, overexploitation of natural resources and urbanisation.
- Geographical education is vital to equip the next generation of people with the knowledge, skills, attitudes, values and practices to value, care and make reasoned decisions for the planet. How best to teach geography to a range of learners is a deep concern and will require significant and ongoing research. We encourage policy makers and geography educators to build capacity in this endeavour in order to conduct both theoretical and applied research.
- Those who teach in primary and secondary schools as well as in further and higher education must be supported by research intelligence. They need the best, critical insights into (for example) the use of new technologies; problem based learning strategies and futures education. This is because teachers are the key to improvement in education, and good teachers need the best tools to work with (IGU CGE, 2015, pp. 3-4).

The 2016 Charter cites a number of important research questions that need to be addressed, including, for example:

- What do geography students need to know, and how we can enhance their geographical knowledge, understanding and skills?
- What are the characteristics of effective teaching and learning material and resources, and teaching methods for improving the quality of geographical education?
- How can the training of geography teachers be improved to raise learning outcomes in school geography.
The 2016 Charter contends that research focused on these and other questions will help to refine curriculum, pedagogy and assessment practices; develop a ‘research orientation’ amongst geography teachers and educators that enables reflective and critical engagement with habitual practices and professional ‘habits of mind’ [emphasis added] (IGU. CGE, 2015, p. 4). It concludes with a six point international action plan. It is argued that given the state of school geography in South Africa at present, the SAGTA and JoGESa have an important role to play in helping our geography education community to advance geography along the lines advocated by the IGU CGE’s 2016 Charter.

Geography Education: National Perspectives

According to Wilmot and Dube (2015) the position of geography in the South African school curriculum is not tenuous nor is it declining in popularity. During the past five years, there has been a steady increase in enrolment evident from the number of learners enrolled to write the State National Senior Certificate [NSC] (from 203 805 in 2011 to 310 300 in 2015) (South Africa. Department of Basic Education [DBE], 2016a, p. 19). Geography remains the fifth most popular school subject of choice in Grade 10 to 12, well ahead of history which had 158,451 learners enrolled for the NSC in 2015 (DBE, 2016a, p. 19). It is also the fifth most popular subject in schools writing the Independent Examination Board National Senior Certificate examination, with 3 800 learners of a total of 10 221 writing geography in 2015. History, in seventh place, was written by 2 982 learners in 2015 (H. Sidiropoulos, email communication, April 20, 2016).

The upward trend in performance in the state NSC noted by Wilmot and Dube (2015) did not continue in 2015 (DBE, 2016b, p. 86). This dip is worrying because it challenges the assertion these authors made about school geography being in a healthy state. In 2014, 81,3% of the 236 051 learners who wrote the NSC Geography exam passed at 30% and above and in 2015 this dropped to 77,0% of the 2303 985 who wrote with only 50,4% of learners achieving 40% or more. The low level of learner performance at the Grade 12 level is an ongoing and persistent challenge. In stark contrast, learner performance in the IEB examination is very good, with 75,4% of learners achieving more than 70% and only 0.9% achieving less than 30%.

In a critical commentary on the levels of learner performance in the 2015 NSC, Spaull (2016a) discusses the consequences of the DBE’s ‘promotion policy’. This policy was aimed at improving access and efficiency in the system by allowing ‘progressed students’ to enter matric (consequently an increase of 21% learners wrote the 2015 NSC examination). He explains how it has caused a “huge crack in the matric standardisation process, one that is only starting to become apparent” (ibid.). Spaull maintains that a massive upward adjustment in marks took place with raw marks increased for 24 subjects. In a subsequent commentary, Spaull (2016b) provides the actual (pre-adjusted) statistics which show Maths Literacy had the biggest adjustment (33%) followed by Business Studies (21%) and Geography (11%). Using the raw marks, the pass rate in geography would have been 66% not 77%. With the marks, mostly at the bottom end of the scale,
being pushed up, Spaull is of the view that universities will be inundated with applications from students who would not normally meet the entry criteria and who are “not even remotely prepared for higher academic study” (ibid., p. 5). There is uncertainty as to whether universities are ready to respond to the need for additional academic support by this group of students. Admitting students who only met the entrance criteria through mark inflation has implications for what and how we teach geography content and teaching methods in our university teachers education programmes.

The DBE’s 2015 NSC Examination Diagnostic Report for Geography gives an overview and detailed analysis of learner performance for each question in the Exam: Paper 1 and Paper 2 (DBE, 2016b, pp. 87-98). In spite of providing general suggestions for improvement each year, the same perennial problems persist, namely candidates’ lack of content knowledge and a lack of basic definitions of concepts; they do not understand the meaning of verbs and what is expected in the answer; they do not cope with questions that require middle- and high-order thinking skills and application of knowledge; basic knowledge of calculations and map interpretation, and GIS.

Similar challenges were identified in recent research on the state of secondary school geography from the perspectives of teachers in selected Eastern Cape public schools, especially Quintile 1 to 3 township secondary schools (Wilmot & Dube, 2015). This suggests that the majority of students enrolling for geography courses at university have low levels of literacy, numeracy and graphicacy. An analysis of the 2015 IEB Geography examiners’ reports provide little, if any, evidence that the same applies to the learners who wrote the 2015 IEB NSC examination.

While regular annual feedback and diagnostic reports on learners’ performance in the NSC examination are provided by the DBE and the IEB, there is little, if any, information available on primary geography. With Annual National Assessments [ANAs] not being implemented and used to assess geography knowledge and skills development in geography in the Social Sciences learning area at lower levels of the national system, we do not have data on how well South African children are performing in relation to national curriculum standards or international standards. What we do know from the 7,1 million primary school children who wrote the ANAs in 2014 is that the majority are not meeting the curriculum standards for numeracy and literacy (DBE, 2015). One may infer that they are probably not meeting the standards for geographical thinking either.

There is a dearth of research on school geography in South Africa. The findings of a small scale exploratory study on primary geography revealed different approaches to teaching and learning in primary school classrooms, an unevenness in resources and sources of information used for teaching, and little evidence of map work being taught (Wilmot & Irwin, 2015). The writer concurs with the 2016 Charter’s assertion that we need more information on what young children are learning and how they are learning in primary geography classrooms, the resources being used, and the level of geographical thinking and skill development. According to Wilmot and Irwin (2015), the situation in school geography in South Africa is complex. It is exacerbated by a
lack of alignment between the physical provision of schooling and the structure and organisation of schooling into bands and phases which is mirrored in the structure and organisation of the national curriculum. Thus, with Grade 7 located in primary schools and Grades 8 to 12 in secondary schools, it means that all too often there are low levels of collaboration between primary and secondary teachers despite Grades 7 to 9 falling into the GET band. This impacts on and negatively affects continuity and conceptual progression.

The challenges facing school geography described above raises the question of what role can, and should, SAGTA play in building communities of practice and collaborative partnerships where university researchers and teachers work together in mutually beneficial ways to strengthen school geography. How can JoGESa enable the sharing of good practices? And how can SAGTA ensure that its membership is representative of the full spectrum of South African schools? Addressing these questions is important given the huge inequalities that characterise South Africa’s school system.

In 2015 there were 12, 8 million children enrolled in 25 691 South African public and independent schools with the vast majority (95,6%) enrolled in public schools (South Africa. Department of Basic Education [DBE], 2015:1). The independent school sector is a small but expanding sector as parents seek alternate forms of schooling. There are 566 194 (4,4%) children enrolled in 1 786 independent schools (6,9% of the total number of schools in South Africa) (South Africa. DBE, 2015:1). Public schooling in South Africa is in a crisis characterised by poor learning outcomes and systemic inefficiencies (Spaull, 2013). Taylor (2011) refers to a two school sub-system in South Africa: one which is functional and well-resourced offering quality education for a minority of South African children (20%), and another which is dysfunctional, offering poor quality education to the majority of children (80%) – most of whom are Black South African children (Spaull, 2013). Given this statistic, SAGTA has a moral imperative to include teachers and educators from the full spectrum of South African schools so that quality geography education becomes a reality for all our children learning geography. It has a critical role to play in enabling better teaching and learning through sharing good practices and resources with teachers in marginalised and dysfunctional schools. SAGTA can play an important role alongside universities and the state in enabling teacher professional development and capacity building.

In addition to having to cope with different curriculum orientations and design features, teachers are tasked with ensuring that school geography is relevant and responsive to the environmental crisis facing the world in the 21st century. The Curriculum and Assessment Policy Statement (DBE, 2011) like its predecessor, the National Curriculum Statement (NCS) (DoE, 2002, 2003), has a very strong environmental content focus which needs to be integrated into all subjects and across all levels of schooling. Geography is seen as a key subject for this integration with more than 50% of the content focused on environment and sustainability learning. In spite of this, Dube’s research (2012) describes the conceptual and pedagogical difficulties geography teachers
at selected schools in the Western Cape experienced with integrating environmental education into their teaching. Similarly, Wilmot’s experience of piloting the UNESCO Climate Change module for teachers and teacher educators in 2012 (Wilmot, 2012), provides insights of the knowledge and pedagogical challenges facing teachers. Re-orienting teachers is not a straightforward or quick process, and it is exacerbated by the diversity and complexity of the school landscape that still characterises South Africa two decades after democracy. One may infer that teachers’ understanding of, commitment to, and capacity for, effective enactment of new knowledge and pedagogical approaches will vary.

South African Geography Education: Participation in national and international organisations and forums

Given that geography is seen as making an important contribution to education for the environment and sustainability and global citizenship, one would assume that geography educators would be at the forefront of curriculum development and innovation. At present, this is not the case with global and national curriculum initiatives mostly driven from outside rather than from inside geography education. This is evident, for example, when one considers South African geography educators’ participation in global fora organised by the International Network of Teacher Education Institutions (INTEI) associated with the UNESCO Chair on Re-orienting Teacher Education to Address Sustainability. Only one South African geography educator (Wilmot, 2011) participated in piloting and further developing course materials for the UNESCO Course for Secondary Teachers on Climate Change for Sustainable Development (UNESCO, 2013). SAGTA offers exciting opportunities for building a strong community that is able to participate more fully in re-orientating education and developing the resources to do so.

In a Southern African context, initiatives responding to the need for quality and relevance in education and re-orientating education towards environment and sustainability have been conceptualised and driven by multi-partner, open knowledge networks. In 2011, the National Environmental Education Teacher Education Network was established to develop resources for integrating environmental education into the CAPS curriculum. The findings of initial research on teachers’ environmental and sustainability context knowledge carried out with teachers (including geography teachers, most of whom work in poor, rural schools) registered for a Bachelor of Education (Honours) degree at a South African university, revealed that while all the teachers demonstrated a fair understanding of local environment and sustainability issues, the depth of their knowledge was a concern as was the finding that “the majority had difficulty in dealing with environmental knowledge that is contested, not certain or not available.” Secondly, there was little evidence that the teachers themselves were equipped to teach in ways that encouraged their leaners to “… challenge established norms or engage with contested knowledge” (Lotz-Sisitka, 2011, p. 45).
Insights from this and other research undertaken by the Environmental Learning and Research Centre at Rhodes University have been used to inform the design of the Fundisa for Change, a partnership programme involving many of South Africa’s major environmental organisations including state, parastatal, NGO and private companies which have an interest in teacher education. Fundisa’s primary goal is to strengthen the teaching of environmental concepts in schools (Fundisa for Change homepage, 2016). To develop teacher capacity for transformative environmental learning aligned to the national curriculum, generic ‘core’ orientating texts and subject specific materials have been developed. Teaching Climate Change (Vogel, Misser & Vallabh, 2013) and Teaching Water (Kahn, Dickinson & Heath, 2014) are two ‘common property’ resources that are being used to integrate environmental concepts into geography teacher education programmes. These materials will also be used for short courses that are endorsed by the South African Council of Educators (SACE) for Continuous Teacher Professional Development (CTPD) purposes. SAGTA can help with advocacy and dissemination of information and resources such as these, and JoGESAA creates a platform for teachers to report the findings of classroom-based research, focusing on how these and other resources are changing their practice. Importantly, the association and journal - like the Association of American Geographers and the Geographical Association in Britain, and their geography education focused journals – provide a formal structure in which resource development and use, classroom innovations and experiments (best practices) can be shared and they will stimulate much needed conversations and debates in geography education in South Africa and other Southern African national contexts.

**South African geography education: Scholarly and professional voice**

SAGTA and JoGESAA can play a catalytic role in advancing geography education in Southern Africa by strengthening our scholarly voice. This is necessary if we are to stay abreast with what is happening in our subject in other national contexts and participate in global debates about the relevance and quality of geography education in the 21st century. Participation in national and international conferences, networks and forums, and research outputs may be used as a proxy for evaluating the strength of our scholarly and professional voice.

A preliminary review of Southern African geography educators’ participation in international geography education conferences, in particular the International Geography Union’s [IGU] Commission on Geography Education [CGE], the largest international geography education association, reveals a low and uneven level of participation with no more than three, and often no papers, being presented at any one conference. From this one may infer that the Southern African geography education voice is intermittent and barely audible in contemporary international debates on geography education in both school geography and geography teacher education. The finding of a review of geography education publications in selected prominent geography education journals (see Appendix A), albeit tentative and partial rather than comprehensive and complete, shows that 45 articles have been published by Southern African researchers during the past 27 years (1998 to 2016). This equates to less than two per year, with Wilmot having
authored or co-authored 11 (25%) of the articles published, followed by Le Grange and Beets with four, and Raselimo and Golightly having authored three. Of the 44 published, only three articles have been published in the past three years (2013-2015) in the South African Geographical Journal, the scholarly voice of geography in South Africa (Britz & Webb, 2016; Wilmot & Dube, 2015; Raselimo, 2013) and only four articles have been published in international geography education journals (Golightly, 2015; Wilmot & Dube, 2015; Wilmot & Irwin, 2015; Raselimo, Wilmot & Irwin, 2013). Furthermore, there have been very few articles focused on geography education in selected prominent accredited South African education journals during this period: none in Perspectives in Education, Education as Change, and the Journal of Education; and only two were published in the South African Journal of Education (Anyanwu, Le Grange & Beets, 2015; Raselimo, Wilmot & Irwin, 2013).

Gathering data on the level of research outputs at a postgraduate level (Master’s and PhD theses) in geography education has been a challenge and has not yet been completed. In the absence of a full set of data, it is not possible to make conclusive comments. The evidence on hand suggests that the level of postgraduate research output is low and that we still have a way to go. It is really important that we address this situation so that we produce knowledge that can inform and strengthen teaching and learning in our schools. JoGESA can, and should, play an important role in encouraging and enabling classroom-based teacher researchers and university-based researchers to put their work into the public domain. This will help to stimulate and enhance the level of debate in geography education nationally and enable us to develop a more coherent and audible voice in the international geography education arena.

SAGTA and JoGESAs: in search of an agenda for the future
SAGTA and JoGESAs provide us with exciting new spaces in which we can deliberate and debate:

- the quality and relevance of what we are teaching and learning, how we are teaching and learning, who we are teaching and for what purpose in geography at all levels of schooling and in our teacher education programmes;
- how we create and share resources and best practices;
- how we develop a strong scholarly and professional voice through participation in national and international debates, forums and publications;
- how we may deepen our understanding and strengthen our practices through research, the type of research we need, why we need it and by whom it should be done, and
- how we disseminate the knowledge we generate through practice and research to the wider national and international geography education community through conference presentations and journal articles.
Conclusion

In concluding, it is significant that South Africa has the highest number of university geography programmes at all levels (Bachelors to PhD) in Africa (Moseley & Otiso, 2010, p.9). This is seen as providing the critical mass for the creation and sustenance of a national level geography society and journal (the Society of South African Geographers and the South African Geographical Journal respectively) (ibid., p.10). Given that school geography (albeit packaged as part of the Social Science Learning Area) is compulsory until the end of Grade 9 and the fifth most popular subject of choice in Grade 10 to 12, one may infer that there is a critical mass for creating and sustaining a national association of geography educators and a journal. SAGTA and JoGEESA provide a mechanism for drawing this mass together, enabling us to expand existing and create new, mutually beneficial partnerships characterised by collaboration, agency and activity, cutting through and across levels and structures, public and independent, theory and practice, to address the challenges we face as a subject, a nation and world, both immediately and in the future.

References


Fundisa for Change homepage. (2016, March 5). www.fundisaforchange.co.za


**APPENDIX A**

**JOURNAL ARTICLES ON SCHOOL GEOGRAPHY IN SOUTH AFRICA (1989-2016)**


Everything you need in an atlas – and more!

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INSTRUCTIONAL ROUNDS
LOREDANA BORELLO
L.Borello@stithian.com
Deputy Head, St Stihians Girls’ College

"The quality of an education system cannot exceed the quality of its teachers" - McKinsey (2007)

ABSTRACT

Classroom observation has been a long term practice in the education sector and has been conducted as a means of improving the methodology of teaching and thus the process of learning. Many teachers have experience of this practice from their student days; when lecturers would arrive to observe a student teacher taking a lesson during their teaching practice. This article discusses some of the issues surrounding the practice of classroom observations in a South African context and offers a valuable alternative perspective on this method of professional development from an American context. Perhaps some lessons can be learned which would be beneficial in helping to improve the quality of education in our country.

INTRODUCTION

In the South African educational setting classroom observations takes the form peers or the Head of Department, Deputy Head or Principal, visiting teachers on an annual basis. In some instances this serves to merely tick a box in the process of appraisals, whilst in other cases they can be used as evidence in a performance management process. In either case, the effectiveness of classroom observation in enhancing teaching and learning is questionable. This is confirmed by the fact that the following year, the same practice is repeated without any evidence of progress in the way the teacher is teaching or the learners are learning. This occurs because observation only takes place once a term, or in some instances once a year, without there being any ongoing discussions through the course of the year on ways to improve teaching and learning.

THE SIGNIFICANCE OF INSTRUCTIONAL ROUNDS

The practice of Instructional Rounds has been successfully carried out in the medical profession across the world. A qualified, experienced doctor takes medical students on hospital rounds to visit patients. The students are asked to diagnose the condition of the patient, decide on the cause and the treatment of the condition. Medical students also have the opportunity to observe experienced doctors working with patients. In this way they are gaining both theoretical and practical experience. Teitel (2013) suggests that Instructional Rounds can also be beneficial to the teaching profession. Teachers can observe each other and then discuss what they have experienced and ways in which improvements can be made.
If teachers plan a section of work together and then take turns to teach the lessons while the other teachers observe, then feedback and discussions on what worked or what could be done differently, becomes more beneficial. Successful Instructional Rounds should result in the professional growth of teachers and the development of best practice in the process of teaching and learning. Feedback to the teacher on how their lesson went seems to be the primary goal of classroom observations. However, in Instructional Rounds the main purpose of feedback should be for the observing teachers to learn about their own practice and for teachers to share their observations with each other. (Marzano, 2011).

According to Marzano (2011), “Instructional rounds are one of the most valuable tools that a school or district can use to enhance teachers’ pedagogical skills and develop a culture of collaboration”. Merseth (2012), a Senior Lecturer on Education and a founding director of the School of Leadership and the Teacher Education Program at Harvard, observed that Instructional Rounds is one of the methods recommended to ensure that effective educational practice is taking place in our schools.

At the Harvard Graduate School of Education summer programme, Leadership: An Evolving Vision (2012), Merseth re-iterated that for Instructional Rounds to be most effective, all teachers should be observing each other. Instructional rounds should be voluntary and does not have to last longer than 15 minutes. During this time, Merseth believes that the observing teacher/s should be able to gather enough evidence to answer the following four questions:

1. What is the teacher saying and doing?
2. What are the students saying and doing?
3. What task has the teacher set for the students?
4. If the students did everything the teacher asked them to do, what would the students know and being able to do?

The level of questioning by the observed teacher is an important indicator of effective learning and teaching. Closed questions which require only ‘yes’ or ‘no’ answers do not elicit high order thinking. If teachers challenge students to provide explanations, then they have to show understanding. This raises the level of cognitive demand. Questions or tasks that require pupils to explain, discuss, evaluate, synthesise or differentiate, require that students understand concepts and are able to apply that understanding to a new situation.

It is interesting to note that this four-step observation tool can also be reversed as a useful guide in planning lessons. The teacher can begin with the last question and work backwards in designing the task to achieve this.
AN ALTERNATIVE PERSPECTIVE

Perhaps teachers in South African schools need to start thinking about Instructional Rounds. Just like medical students learn their practice from observing other doctors, so teachers could adopt a similar approach. Teachers observing teachers can improve both theory and practice. The purpose of Instructional Rounds is to observe closely what is happening in the classroom and to learn new strategies to solve problems and to improve the practice of learning and teaching (such as how to manage individuals versus group dynamics, what questions to pose that will elicit thinking or how to ensure that everyone has understood the task and not just those that nod their heads).

Teitel (2013) is quite adamant that instructional rounds should be seen as a teacher development strategy and not merely as an observation practice. If the goal is to improve the practice of teaching and learning then classroom observation needs to take on a totally different approach. Instead of the HOD, Deputy or Principal visiting teachers once a term or once a year for evaluation purposes, instructional rounds need to become part of continuous assessment and teaching practice. Teachers must be expected to visit colleagues and to share observations and insights in a non-judgmental way in order to improve both learning and teaching. This means that teachers must have the time and be available to observe one another. There is no doubt that to ensure the success of instructional rounds, school timetables would need to be adjusted to enable this practice.

RECOMMENDATIONS

A further extension of Instructional Rounds would be for educators to visit colleagues in other schools. St Stithians Girls’ College undertook teacher exchanges with Durban Girls’ College, South Africa, as well the Lawrence School in Sanawar, India.

Two teachers (Mathematics and Accounting) spent one week in Durban and two weeks in India (Accounting and Academic Support). This was reciprocated with teachers from the same subjects / department in the respective schools visiting St Stithians Girls’ College. The opportunity to share pedagogy, systems and structures to improve learning and teaching in the respective environments was most valuable. Teachers learned about different teaching methodologies, different cultures of learning within a variety of different subjects, different timetables and different ways of assessing.

Education requires a shift in mindset from the top-down appraisal practice of classroom observations to a learning practice of Instructional Rounds. This required shift in mindset can be linked to the concept of Fixed Mindset vs a Growth Mindset (Dweck, 2007). The current practice of classroom observations follows a fixed mindset approach. The Head observes the teacher in class, provides feedback thus ending the process.
It is very rare that there is any follow up to see if teaching and learning has changed. The teacher is left thinking “I can carry on teaching as I have always taught.”

The Growth Mindset of Instructional Rounds is a continuous growing and learning experience as the teacher is observed many times by different people who all share their practice to deepen and improve it. It is a collaborative approach that relies on engagement and inquiry rather than compliance (Teital, 2013). The teacher is encouraged to try different approaches and keeps thinking “How can I improve the way students understand this concept?”

This alternative perspective could go a long way to improve the practice of learning and teaching in both well-resourced and under-resourced schools in South Africa. It does however, require a deep understanding of what high quality teaching and learning looks like. It also requires a whole school strategic approach which makes time available for this process to be successful, through effective timetabling.

REFERENCES


Platinum Interactive Skills Atlas

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2. REPORTS

2.1 The Southern African Geography Teachers’ Association (SAGTA) inaugural Conference 21-23 August 2015
Pam Esterhuysen, The Wykeham Collegiate

The first inaugural board meeting and conference was held in Pietermaritzburg. Board members met for a five-hour marathon meeting on Friday 21 August. The one-day conference hosted at The Wykeham Collegiate on Saturday 22 August boasted an intense programme.

At the start of the conference programme, the delegates went into the CBD to look at some of the urban challenges faced by municipalities around the country. The group spent 2 hours exploring the Pietermaritzburg Urban Renewal Program (PURP), which is aimed at restoring the pride and dignity of citizens of the municipality (du Plessis, 2015). Some evidence of this programme viewed by delegates included:

- urban food gardening
- paved road sections adjacent to the City Hall
- solar lighting and robots at road intersections
- keeping public space litter free
- well preserved statues that were representative of many periods of the country’s history and heritage.

The speaker programme was varied and kept delegates interested and keen. Tony Hambly presented what was to be his last lecture and in true form, kept us entertained. His lecture was rated the most valuable item on all the feedback forms. What a legend!

On Sunday 23 August, delegates participated in an optional drive up Sani Pass. The group met Sani Pass Tours in Underberg and were transported up the Pass in 4 x 4 vehicles. After a visit to a small Basothu village, Skiring, we were able to enjoy lunch at the Sani Top Pub, including some Maluti (beer) or gluwein.

NOTE: For those that were on the trip...it is interesting to note that the tender for the tarring of the actual Sani Pass has finally been awarded and that road works should start later in 2016.
2.2 Championing map use – Mapwork Symposium (2016) 
Dr Lorraine Innes, UNISA

Glen Samaai has always championed the use of maps (see Figure 1) in his Geography lessons. He believes that ‘every geography lesson is a mapwork lesson’. After 30 years of teaching Geography at Klein Nederberg Secondary School in Paarl, he was appointed Geography Subject Advisor for the Cape Winelands Education District in 2013 and now shares his passion with teachers at 57 Secondary Schools in his district.

In celebration of International Map Year 2015-2016, Glen organised a Mapwork Symposium on Saturday 12 March 2016 at his old school. Andre Jacobs, who has recently been appointed Geography Subject Advisor for the Eden Karoo Education District, explained how to introduce basic GIS concepts using the poster he has designed. Sumayya Patel who works for the Chief Directorate: National Geo-spatial Information (NGI) built on the basics in her presentation on teaching GIS using QGIS which is a free, downloadable GIS package available on the Internet.

After tea Mike Eksteen, Geography Subject Advisor based at Metropole East Education District, reviewed the state of mapwork at Western Cape schools as revealed by the results for Paper 2 in the Grade 12 Geography exams. His guidance on how teachers can help learners avoid common errors was much appreciated. Glen then lead a most informative session on making maps an integral part of every geography lesson.

Following a delicious lunch, Lorraine Innes (Academic Associate of the Geography Department at UNISA) got teachers to play ‘Stupid Question’, a quiz game designed to make using an atlas a great deal of fun. Elsworth MacPherson, recently retired senior lecturer at the University of Western Cape, summarised the day’s activities. He emphasised the importance of joining the newly formed Southern African Geography Teachers Association (SAGTA) and then congratulated Glen on an excellent symposium.

Figure 1 Glen Samaai, Cape Winelands Education District’s map use champion

Figure 2 NGI sponsors the supply of local topographic maps to schools throughout South Africa

Teachers left with a generous bag of handouts (see Figure 2) prepared for each school. It included Andre Jacobs’s GIS poster, MapPacks provided by NGI plus a number of other teaching resources including map puzzles and DVDs containing 1:50 000 topographic maps. When Clive
Minnaar of Bridgehouse School thanked Glen, the audience agreed that this should be the first of many such events.

Contact addresses of symposium presenters:

geogsglenn@gmail.com
janandriesjacobs@gmail.com
Sumayya.Patel@drdlr.gov.za
Mike.Eksteen@westerncape.gov.za
Linnes.rsa@gmail.com

2.2 American Association of Geographers Annual Meeting, March/ April 2016, San Francisco
Clinton D. van der Merwe

I had the privilege of attending this phenomenal conference, both in my personal capacity – presenting some preliminary findings from my PhD research – and as a representative of SAGTA. With over 6000 talks and many, many fieldtrips – this was one of the BEST conferences I have ever been to. I touched based and networked with several key people, who represent and run various Geography Education Speciality Groups. SAGTA is building international relationships with American Geography teachers. What an awesome experience! Have a look at the phenomenal programme:


AN EXCITING DEVELOPMENT: The SAGTA is prepared to co-fund a Southern African Geography Teacher to attend and present at next year’s conference in Boston (5 to 9 April, 2017). See details on page 6. San Francisco truly is a phenomenal city… although the homelessness really upset me and made me think! What are we as Geographers doing to help sort out inequality and social injustices? Here are some of my San Franciscan highlights in picture form:
3. **Best Practice in the Geography Classroom**

**TEACHING AERIAL AND OBLIQUE PHOTOGRAPHY WITH QR CODES**

Celia Sauerman ([celiageography@gmail.com](mailto:celiageography@gmail.com))

Westville Girls High School, Durban, South Africa

1. **Introduction**

The purpose of the lesson was to allow the learners to use their cellphones in class and make the lesson more age appropriate, the use of cellphones during teaching time is usually not allowed, I was interested in exploring the pedagogical possibilities of using cellphones to teach some geographical concepts, so made a professional decision to allow the girls the use of their cell phones for this lesson(s). Kolb (2011) shows how exciting it can be using cell phones in your teaching. This assisted the learners in understanding the difference between aerial, high and low oblique photographs. Using a QR Code Maker app or a free QR Code Generator on the web, I created the following QR codes. I found it easier to work on a computer via the Internet, as I was then able to save my cards that I generated. The best free websites were: [http://goqr.me/](http://goqr.me/) and [https://www.the-qrcode-generator.com/](https://www.the-qrcode-generator.com/). This was a very easy process once I knew what I wanted.

During the lesson before this, the learners had watched a YouTube clip on how aerial photographs are made ([https://www.youtube.com/watch?v=vkSZfD-F1Io](https://www.youtube.com/watch?v=vkSZfD-F1Io)). I then explained to them the requirements, such as working in pairs as well as the app that was required for the lesson. They worked in pairs and all selfies (a photograph that one has taken of oneself, typically one taken with a smartphone or webcam and shared via social media) required both learners to be in the photograph. This was a first for my school, as we do not ordinarily use cellphones in the classroom, and research shows that there are advantages to allowing learners the use of mobile technologies in their learning (Dunleavy et al., 2009). The learners were given the instruction sheet, as included in this article and then set to work on the scavenger hunt through the school. The first photograph that they took was at the highest corridor window in the school, where they were required to take a high oblique photograph of a quad in the school. This was all explained on QR Code Number 1. Then using a second code they were required to find the third code, which required them to take a low oblique photograph of the same quad. Once they found the fourth code, they were required to take selfies: aerial, high and low oblique photographs. It was interesting that many learners looked up at the camera when taking the aerial photograph. It was only once I reminded them what an aerial photograph was, did they grasp the concept. Once the learners took their photographs, they were required to download their photographs and create a one-page summary (see an example attached) of their findings with the relevant headings and details as stipulated in the last QR Code on the instruction sheet.

---

1 Source: [https://www.google.co.za/?gfe_rd=cr&ei=L_DAU-mBFK7R8geJ34GoDA&gws_rd=ssl#q=selfies+definition](https://www.google.co.za/?gfe_rd=cr&ei=L_DAU-mBFK7R8geJ34GoDA&gws_rd=ssl#q=selfies+definition) - accessed. March 2016.
It was here that the learners grasped the concept of high oblique as they realised that it required the horizon in the background for their ‘selfies’ as well as the quad. This task was a one-page summary of the six photographs, including a cropped aerial photograph of the quad taken from Google Earth. The lesson was thoroughly enjoyed and was manageable in a 50-minute lesson.
Grade 10: Aerial and Oblique photography Task

You will be required to use your cellphone or tablet for the following task. You will be working in pairs so you will need a minimum of one cell phone between two people.

STEP 1:

At home or after school please download the following app either from App stores or Google play onto your device prior to the lesson. It is an essential tool for the purpose of the task.

It is called QR code Scanner or Reader.

*Please ensure that you bring your phone cable with so you can download photos onto the computers at school as you will not have access to Wifi during school hours.*

STEP 2:

You will be required to use the App to follow the instructions in order to complete the task. Scan the following QR code to get your first instruction.

STEP 3:

You will be required to follow the prompts on all the other 6 QR cards placed around the school to complete the task.

STEP 4:

Once you have completed all 7 QR cards (including this one on your page), you need to report to the computer room that your teacher has booked. Then you will be required to read the last two QR Cards below to complete the task. This task must be completed in class time and emailed to your geography teacher.
Here is an example of a well-done one-page summary, which was part of the assessment:

**AERIAL AND OBLIQUE PHOTOGRAPHY TASK**

**NAMES:**

**GRADE:** 10

**SCHOOL AERIAL PHOTOGRAPHS**

A. AERIAL PHOTOGRAPH

B. HIGH OBLIQUE

C. LOW OBLIQUE

2. SELFIES

A. AERIAL PHOTOGRAPH

B. HIGH OBLIQUE

C. LOW OBLIQUE
Assessment Tool

Learners’ names: ________________________________________________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Marks</th>
<th>Learner’s Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting deadline</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Aerial Photograph</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerial view of grade 11 quad only</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(not whole school)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>True selfie</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Correct position of photo</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>High Oblique Photo</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Oblique of grade 11 quad</td>
<td>1</td>
<td></td>
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<tr>
<td>including horizon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>True selfie</td>
<td>1</td>
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</tr>
<tr>
<td>Correct position of photo with</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>horizon in</td>
<td></td>
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<tr>
<td><strong>Low Oblique Photo</strong></td>
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<tr>
<td>Low oblique of grade 11 quad</td>
<td>1</td>
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<tr>
<td>with no horizon</td>
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<tr>
<td>True selfie</td>
<td>1</td>
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</tr>
<tr>
<td>Correct position of photo without</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>horizon</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CREATIVITY 1

1 page presentation 1
Well presented 2

TOTAL 15

2. Conclusion

The girls thoroughly enjoyed this lesson. Exploring the use of cell phones and other digital technological in the classroom requires further investigation and research in Geography Education. Much research shows that preparing learners for the 21st Century requires more use of digital and ‘smart technology’ (Nielson and Webb, 2011). I am keen to pursue the use of more ICT and handheld technologies in the teaching of Geography in Southern Africa.

References


Empowerment for the Future Generation

Fundalula’s aim is to develop a set of geospatial critical thinking, reasoning, teamwork, investigative and creative skills that students can use in all areas of their lives.

The South African Department of Basic Education has for an extended period of time experienced challenges with Mapwork in Geography at schools. Geographic Information Systems (GIS) has been phased into the school as part of the Mapwork curriculum since 2006. However, this introduction has triggered more challenges in the approach and engagement of learners when teaching Geography.

Esri South Africa has been supporting secondary schools since 2006. From Esri South Africa’s experience, the common and consistent issue that many teachers share, is that the Mapwork component (which makes up 25% of the Geography paper), poses a real challenge to educators and learners. Esri South Africa studied the Curriculum and Assessment Policy Statement document (CAPS) relating to the Geography curriculum and with the help of experienced Geography teachers, Esri South Africa, has developed an application ‘Fundalula’ that covers every component of the South African Geography Mapwork curriculum.

Teaching geography in the 21st Century cannot be successful without promoting the use of new technologies, such as Information Communication Technology) and GIS.

Fundalula combines short interactive lectures, videos, hands-on exercises, brainteasers and demonstrations to keep Mapwork interesting and easy to understand. Students have different learning styles and Fundalula seeks to cover different approaches to ensure that learners learn while they play. Fundalula encourages teachers to leverage the computer technology to discover and create an engaging and dynamic learning environment in the classroom.

Fundalula develops a set of spatial critical thinking, reasoning, teamwork, investigative and creative skills that students can use in all areas of their lives. Geography with Mapwork using GIS is the key to unlocking the understanding of our interconnected world.

Verousha Naidoo

For more information, contact us on:
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fundalula@esri-southafrica.com
www.esri-southafrica.co.za
Why use an atlas to teach Geography? STUPID QUESTION!

Dr Lorraine Innes (Linnes.rsa@gmail.com)  
UNISA

Stupid question is the name of an atlas game that teaches logic and place knowledge and encourages geographical thinking. By asking a series of twenty questions, learners eliminate information to discover a place identified by a challenger.

How it works

• Having decided on a place, which must be listed in an atlas index and kept secret, the challenger, says: “You’ll never guess where I am!”
• The group have to guess the place by asking 20 questions to which the challenger answers either YES or NO (no words or other clues are given).
• The challenger is out if the place can be guessed in less than 20 questions. If the challenger is not out after answering 20 questions, he or she wins and gets another chance. However, challengers must prove that they have won by showing the place in the atlas and defending any answer that they gave which the questioners might dispute.

Scoring

• The first question should identify the geographic category of the place by asking whether it is physical (i.e. a natural feature) or human (i.e. a constructed feature)
• Each logical question, whether the answer is YES or NO, counts as one of 20 attempts
• Each STUPID QUESTION is penalised by three points. A stupid question
  • cannot have a YES or NO answer
  • ignores a fact that has already been established
  • repeats a question that has already been asked
• To incur the penalty, the challenger or anyone else listening, shouts out STUPID QUESTION!
• It is a good idea to appoint a scorer. Have the numbers on display, listed from 20 down to 1 and cross them off after each question.

Example

<table>
<thead>
<tr>
<th>Questioner</th>
<th>Challenger</th>
<th>Score</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it a natural feature?</td>
<td>YES</td>
<td>-1=19</td>
<td></td>
</tr>
<tr>
<td>Is it constructed?</td>
<td>STUPID QUESTION</td>
<td>-3=16</td>
<td>Only two geography categories are used; fact has already been established</td>
</tr>
<tr>
<td>Is it in the northern hemisphere?</td>
<td>YES</td>
<td>-1=15</td>
<td></td>
</tr>
<tr>
<td>Is it in Australia?</td>
<td>STUPID QUESTION</td>
<td>-3=12</td>
<td>Location in northern hemisphere has already been established</td>
</tr>
<tr>
<td>Is it in Europe?</td>
<td>YES</td>
<td>-1=11</td>
<td></td>
</tr>
<tr>
<td>Are they mountains?</td>
<td>YES</td>
<td>-1=10</td>
<td></td>
</tr>
<tr>
<td>Is it Mount Everest?</td>
<td>STUPID QUESTION</td>
<td>-3=7</td>
<td>Location in Europe has already been established</td>
</tr>
<tr>
<td>Is it in Germany?</td>
<td>NO</td>
<td>-1=6</td>
<td></td>
</tr>
<tr>
<td>Is it the Alps?</td>
<td>YES!</td>
<td>-1=5</td>
<td>Challenger is out with five questions to go.</td>
</tr>
</tbody>
</table>

Teacher guidance

With a little practice, the teacher can encourage questions that: illustrate direction and coordinates; differentiate between absolute and relative location; distinguish between continents, countries and cities and identify landforms such as capes, bays, rivers and mountains. Use places featured in the news to make learners aware of current events while encouraging geographical thinking and engaging learners through active participation.

(Source: http://ian.macky.net/pat/map/za/za_blu.gif)
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We can also conduct in-house training at your school (minimum of 10 participants)
FLIPPING THE CROSS SECTION LESSON

Celia Sauerman (celiageography@gmail.com) & Natalie Tyler (tyler@wghs.co.za)

Westville Girls High School, Durban, South Africa

1. Introduction

The purpose of the lesson was to flip the lesson\(^2\) and get the learners to teach themselves. The flipped classroom is a pedagogical model which reverses the role of the classroom and homework. The learners are given tasks for homework, whereby the tasks can be viewing a video clip or two, watching a full documentary or doing a bit of research and reading before a lesson. The learners are thereby entering the classroom with prior knowledge on a topic. The class time is devoted to activities, projects or discussions. This pedagogy creates active learners who start to take responsibility for their learning and become more critical thinkers.

We have been exploring this pedagogical possibility of flipping the lesson and when Dave Carr from St Cyprus had recently emailed a lesson on cross sections, we adapted his lesson to our environment as we found his very specific to Cape Town. Prior to this lesson we had taught the Grade 11 learners different landscape features and how to recognize them on a topographical map.

The learners were then given a 50 minute lesson in the computer room. However this could be a homework task whereby the learners complete it in their own time. This type of lesson gives the learners the opportunity to work at their own pace and in their own time, especially when learners are absent. This also gives the teacher time to deal with individual learners rather than struggling to keep the attention of the whole class.

The learners were required to use Google Earth and investigate the Tafelberg regions in the Eastern Cape. They needed to find the different features such as Buffelskop, Wolweberg, Folminskop and Oskop on both the satellite image and the map. By following the instructions the learners then learn to draw a cross section or an elevation profile on the computer. See the attached task sheet for a step by step process on how to draw a cross section on Google Earth. This process allows the learners to visualize the concept a cross section.

The learners then watch “How to draw a cross section” on YouTube. This is done by themselves with earphones on if in a large venue or at home. However we originally had a problem with viewing of a YouTube clip as access is denied to the learners at school. I managed to download the YouTube clip (www.youtube.com/watch?v=StDYPluk25M) and made it accessible via our Edmodo Grade 11 page. This was first shown to the class as a whole class but this defeated the

\(^2\) Adapted from https://net.educase.edu visited on 12 march 2016
objective of a flipped lesson. In the future, I will ensure that the learners watch on their own as they are too dependent on having a teacher present to answer their questions. The YouTube clip a great illustration on how to draw a cross section step by step. This allows the learners to access the clip at their own time and pace, allowing them to stop when they need to and complete the task. This also assists with the mixed ability classrooms where the top learners grasp the concepts immediately on their first view viewing while the strugglers and weak learners will watch the clip a number of times before they have grasped the concept.

Using the enlarged map extracts, the learners were required to draw the four cross sections, in pairs. However one had to draw all their cross sections using a vertical scale of 1 centimetre to 100 metres while the other learner had to use the vertical scale of 1 centimetre to 20 metres. This then leads learners on to the skill of vertical exaggeration. The learners were also required to answer a few additional questions.

**Grade 11 Cross Sections Self Study**

Cross sections show the profile or side view of a feature. In drawing a profile using the contours you are able to understand the shape of the land along on transect (line of travel).

Identify the following features on the topographic and the orthophoto map extract of Tafelberg. See how the contour lines are giving you information about the elevation, and profile of the features.

- Buffelskop
- Wolweberg
- Folminskop
- Oskop

Go to Google Earth and search for each of the features above. You will need to type in the feature and then Eastern Cape. E.g. Buffelskop Eastern Cape. Google Earth will take you to that feature.

Now you are going to draw a path across each feature to get an idea of what a cross section will look like. Here’s show:

1. Click on ‘add path’ on the toolbar across the top.
2. Click on the Google map and drag the line over the feature and name it according to your feature.

3. Find the ‘places’ tab on the sidebar (make sure it is visible. If not click on ‘view’ at the top and click ‘sidebar’).

4. Right click on your feature in the ‘places’ tab and click ‘show elevation profile’. This is what a cross section looks like.

Repeat this process for each of the features, or until you get a better understanding of cross sections.
Watch this YouTube video
https://www.youtube.com/watch?v=StDYPluk25M

Write down the definition of a contour.

_________________________________________________________________________________
_________________________________________________________________________________

Compare the contour interval as shown on topographic and orthophotomaps.

Topographic: ____________________________

Orthophoto: ____________________________

Now, based on the YouTube video that you watched, your Google Earth interaction and the two attached maps you are going to draw some cross sections.

In pairs, draw a cross section of each of the features listed above.
One partner is to use a vertical scale of 1cm = 100m and the other a vertical scale of 1cm = 20m. Make sure you label the axis, the starting and end point, and give your cross section a heading.

Study each cross section and account for the differences in your cross sections. Give a written answer.
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
Aerial Photo of the Tafelberg area (note the shadows indicate the elevation of the features)
Topographic map extract of the Tafelberg area
2. Conclusion

The girls grasped the concept of cross sections extremely well and we were surprised at what they produced. The flipping the lesson concept needs to be explored more as this creates active learners. The use of digital technologies such as computers; Geographical Information Systems/Science (GIS) in the classroom needs further investigation as well as more research into the benefits of the digital classroom within Geography Education. A great many scholars have shown that preparing learners for the 21st Century needs more use of digital and ‘smart technology’ (Nielson and Webb, 2011). We are very keen to pursue the use of more ICT in the teaching of Geography in Southern Africa.

References

Carr, D. Out the classroom window lesson posted on sageographyteachers@googlegroups.com on 9 February 2016.


4. Travel Blogs

LESSER KNOWN TOWNS ARE TREASURE TROVES

Pam Esterhysen, The Wykeham Collegiate

Imagine travelling in the Northern Cape on the 2nd January 2016 through a country in the grips of a devastating drought. Soaring temperatures of 42°C, just a few dust eddies on the horizon and kilometres of fallow land.

The dust bowl of South Africa – Northern Cape 2 January 2016,

The route probably not familiar to many – the N12 between Kimberley and Three Sisters. We had just done a gruelling 80 km paddling the Orange River and were heading from Hopetown to Prince Albert. One would probably be tempted to pass by yet another Karoo town, in decline, but this time we decided to stop in Britstown. We found an oasis in this quaint, renewed and vibrant town, even in the midday scorching sun. We can across The Old Mill Coffee Shop. It boasted bric-a-brac, wholesome food and antiques all in one venue. The restaurant and tea-garden was a buzz with locals and travellers dropping in. We definitely would drop in again.
The Old Mill Coffee Shop in Britstown

The tea garden at the Old Mill Coffee Shop, Britstown
5. Eulogies

Anthony William Hambly

Written by Pam Esterhysen

Born in Bulawayo in 1942, Anthony (Tony) William Hambly completed a Bachelor of Arts degree in psychology and geography at Rhodes University and later obtained his Bachelor of Education through Unisa. He married Maureen Wadley in the December 1969 in Rhodesia (Zimbabwe). Following his student days Tony very quickly assumed the proper form for a school master having a successful career at three esteemed Zimbabwean schools. He became the youngest deputy headmaster in the history of the Rhodesian education department.

The family moved to South Africa in 1978, and Tony was appointed Head of Geography at Treverton College and became deputy headmaster in 1980. He retired from Treverton in 2008 after 31 years of service, when he and Maureen moved to Pietermaritzburg. Tony took up a post at Maritzburg Christian School. Tony leaves his wife, Maureen and two daughters, Claire and Vivienne who work in New York and London respectively. Tony has been described as ‘quite a character’ by many of his colleagues. He taught lifelong lessons rather than standard classroom lectures and is known to have taught geography from on top of a cupboard (Pieterse, C. 2015). Tony was the driving force behind the Flat Earth Society South Africa (Fesa) and is renowned for his Flat Earth banter. According to Dave Purdon who taught with Tony at Treverton: “He wanted the pupils to think critically, and not just accept the things they were told. He encouraged them to always question the status quo.” Another colleague said: ‘Tony, you will be missed in
our circles, after all the earth is Flat. In a (flat) world where there are so few heroes, Tony stood out head and shoulders above the rest. Eugene Brown had this to say: “Many of us would not be where we are if it were not for Tony’s inspiration. Rest in peace - the legacy you left will never be forgotten.” Another colleague and co-author, Peter Beets wrote this in his condolence message: “Tony was truly a great geographer. He always used his energies to enhance the quality of teaching and learning in our country and so many (unknown to him) could use his wisdom and pedagogical insights. Perhaps the words of Gaylord Nelson are adapt: *The ultimate test of our conscience is our willingness to sacrifice today for future generations whose words of thanks will never be heard.* In the words of Mustapha Ataturk: *He was like a candle – he consumed himself to light the way for others.*”

In the Independent Examinations Board (IEB) circles, Tony was respected as ‘the mapwork examiner’. Many teachers followed his travels and movements, hoping to predict the next mapwork paper. Tony also produced the in-house magazine or journal called *The Meridian*. Two favourite sections from this journal were ‘Uncle Fred’ and ‘Teaching for the Last Period Friday’.

For those who wondered about the use of Latin inscriptions, Tony’s father was a Latin teacher in Rhodesia, so he had a wealth of phrases which he used to make the readers think. So many of us are the richer for knowing Tony; and I like to believe that we will continue the legacy he has left us with; that is to always aspire to inspire.

**NOTE:** If anyone knows what Tony meant by ‘*Nil Illegitimae Carborundum*’ – email Pam Esterhysen esterh2@telkomsa.net and win yourself a book voucher! First correct answer wins!

**References**

6. Book & Geography Teaching Resources Reviews

1. Teaching Global Air Circulation?

Clinton D. van der Merwe (clinton.vandermerwe@wits.ac.za)
Wits School of Education, Johannesburg

Many geography teachers find teaching Global Air Circulation quite a challenge. Most of your learners will struggle to mentally see or visualise the 3-Dimensionality of the atmosphere, when you teach this section of the grade 11 Climatology syllabus. The Curriculum Assessment Policy Statement (CAPS) for Geography states that we as teachers should teach it as follows:

**Global Air Circulation**
- global air circulation – a response to the unequal heating of the atmosphere;
- World pressure belts;
- tri-cellular circulation: Hadley, Ferrel and polar cells

(South Africa, 2011, page 30)

Not the easiest of sub-sections and range of concepts to teach! A very useful digital tool to use when teaching the general air circulation of the atmosphere is (http://www.ukdivers.net/flash/globalwinds) – see what you think! All you need is a reliable Internet connection and a decent laptop and data projector, and this will make an abstract geographical concept such as this, become more concrete and understandable for your grade 11 class. Those teachers without the comforts of technology could even replicate the process, step by step, from this simulated model, by drawing it on the blackboard, using different colours, over time – with your laptop on your desk as an aid.

(Source: http://www.ukdivers.net/flash/globalwind)

What I like about this simulation model, is that I can control the process and click the various buttons as I explain various geographical concepts and climatological processes which are important to address – sequentially – when teaching this section of the Climate Syllabus:
1. Hot air rises; creates a Low Pressure on the Surface. Cold air subsides (sinks) and creates a High Pressure on the Surface. We link this to the creation of world pressure belts of the Earth (as seen in the CAPS extract, above).

2. Wind (horizontally moving air) always moves from a High-pressure area to a Low-pressure area. Now we can teach the regional winds – Tropical Easterlies (or NE Trade Winds and SE Trade Winds – depending which hemisphere you are in); the Westerlies; and the Polar Easterlies. A discussion and having taught Coriolis Force (and its effect on moving air), as a result of the Earth’s Rotation would be important here.

3. Divergence of air (associated with a HIGH PRESSURE of air) and Convergence of air (associated with a LOW PRESSURE of air) can also be taught and brought into the mix.

4. The 3-Dimentionality of the atmosphere (air rising; other air sinking/ subsiding; and air blowing in one direction on the surface and in another direction in the upper atmosphere at the tropopause – can be clearly illustrated now – creating the Hadley, Ferrel and polar cells of the Earth’s air circulation (remember we would have taught PGF, CF and FRICTION).

5. For those classes you can stretch a little further, academically, the jet streams can be introduced and explained. It is important for the learners to see that air moves around the Earth in ‘bands/ bangles’ of air, as the world is rotating on its own axis.

References

Prentice-Hall, GeoSciences. As found on the Internet at:
