



From the editorial team

[Rory, Ina](#), and [Mpho](#)



The second issue of the bulletin is here to kick-start your year with a number of exciting contributions, ranging from “Managing noise levels in large classes” (Carel Oosthuizen, Dept. Zoology and Etymology, p1) to a “Campaign to end plant blindness” (Nigel Barker & Angelique Kritzinger, Dept. Plant and Soil Sciences, p6). Many thanks to all the contributors.

We are also glad to launch a companion piece to the T&L@NAS Bulletin, namely the [T&L@NAS Resource List](#). The intention is to collect all the apps, books, articles, etc. mentioned in this bulletin, as well as some extra ones being used in our community, into an easy to refer to list. Each item appears with a brief description, relevant links, and a HowTo step guide in some cases. The list will be updated with each issue of the bulletin. Find the first list [here](#).

We invite, or should I say challenge, all our colleagues to share some of their experiences with us in the next bulletin (see p8 for more details). Contributions from other faculties are also most welcome.

Managing noise levels in large classes *# tried and tested* [Carel Oosthuizen \(Department of Zoology and Entomology\)](#)



I lecture Animal diversity, ZEN 161, which is a large enrolment first year module in the Department of Zoology and Entomology. Animal diversity is taught to more than 900 students from four faculties and across 30 different degree programmes during the second semester. The module content is presented using a diversity of teaching and learning principles to ensure overall success of the students. The use of peer instruction, an audience response system (clickers), on-line classes, in class video's and continuous assessment are examples of methods used to increase student understanding and success.

There are three lecture groups that drastically differ in the number of students present in class on average. The smallest, larger and the largest group consist out of 50, 150 and 700 students, respectively. Managing noise levels in the two smaller groups are normally easy and the students do cooperate with a little motivation from my side. The challenge comes in to create a silent, learning conducive environment for explaining new concepts and regaining order after allowing peer instruction or showing a video in a class of about 700 students. The method that I apply has been very effective for the last 7 years and I would like to share this with you.

When I meet the students for the first time in the second semester, during my first lecture I would normally allow myself some time to explain to the students why order in a large class creates the best opportunity for most students to concentrate and learn. Apart from that, I also explain to them that at any given time there are several thoughts going through my head centred around the best way I can explain a specific concept. Some of the thoughts are regarding what I just said, what I am saying and what I want to say. When I notice someone not paying attention or I need to try and speak louder to make sure that the other students can hear me, I am immediately distracted and that reduces the quality of the content that I convey to the whole group.

Normally the semester would start off well with regard to the noise levels and a single request for everyone to be quiet while I am speaking prove to be sufficient. As the semester progresses a single request soon becomes obsolete. Several requests to be silent normally follow. A more drastic approach to gain order in these large classes is activated when my number of requests for silence exceeds three. I would then proceed to ask whether anyone would have a problem if I instructed students to leave the venue if I see them talking. I ask them to please raise their hands so that we can talk about it if anyone would have a problem with this. Normally no one would raise their hand and that would be enough to have complete silence in the class for the duration of the lecture. Towards the end of the semester it might happen once or twice that I actually request a student to leave the lecture venue.

When I used this approach for the first time seven years ago and actually requested the first student to leave the lecture venue because of the disruption caused, I thought that it would not be accepted by class mates and that I will receive scathing reviews at the end of the semester. To my surprise, most of the students, then and now, would thank me for creating an environment where they are actually able to concentrate and hear every word that I say, ultimately increasing their opportunity to learn during face-to-face time.

Coffee table book *# sharing tools and practice*
[Estelle Drysdale \(Department for Education Innovation\)](#)



Everytime when we present training, lecturers ask us for ideas of how some of the tools in clickUP have successfully been implemented.

History: When we designed the clickUP Intermediate course (in 2008), I decided to share a few stories of Education Innovation with the participants on how the Assessment tools were used and implemented in four different courses. During that time our Department also acquired the Cultivate Course Material (developed by Eiffel Corp). They had a Power Point template that looked like a book. I then realised that I could put the information into a book format so that it looks like a book, thus [the Coffee table book](#)! We have since renewed the template and recorded some live presentations where lecturers would share their teaching and learning practices at the Flexible Futures Conference. The purpose of the book/blog is to:

- share the stories so that you can get more ideas to enhance your own teaching and learning practice
- identify what are the educational benefits of using technology in your course
- encourage you to participate in this project.

This book/blog is available digitally on the [clickUP Helpsite](#).

How to participate: If you think that what you are doing is something to share with the rest of the lecturers at UP and that it might make a difference in other people's lives (both students and lecturers), then please feel free to contact me at estelle.drysdale@up.ac.za. I have also developed a template which you can use to put your ideas together of what you want to share and to help you tell your story.

The trials and tribulations of Turnitin Peer review in a large class *# trying out*
[Erika Pretorius \(Department of Geography, Geoinformatics and Meteorology\)](#)



GIS 221 is an introductory module (2nd year) to Geographic Information Systems. The composition of the student body is diverse with students from various faculties, departments and disciplines. The introduction of peer reviewed exercises was considered because previous students illustrated difficulties when they had to critically assess the quality of their own work. It was hoped that they would improve their "skill" by assessing their peers.

There are two major aspects that one must keep in mind when setting up a peer review exercise.

1. **Time:** Setting up a peer review exercise requires a fair bit of preparation and also a bit of lateral thinking. One has to allow for all assessments to be submitted before the peer review process can commence. (So

that the system can suitably distribute the tasks). Then there must also be enough time allowed for students to complete the peer reviews.

2. **Limited question types:** The Turnitin peer review question options are limited to a rubric or a Likert scale. Setting up the rubric-based questions was fairly standard, but where a rubric was not suitable, the questions had to be set up using a Likert scale which significantly complicated the assessment.

Furthermore, the Turnitin process only partially integrates with clickUP and it took lots of time to transfer and record marks properly. Some (only a few) students did not complete the peer review and therefore not all students were evaluated by more than one person.

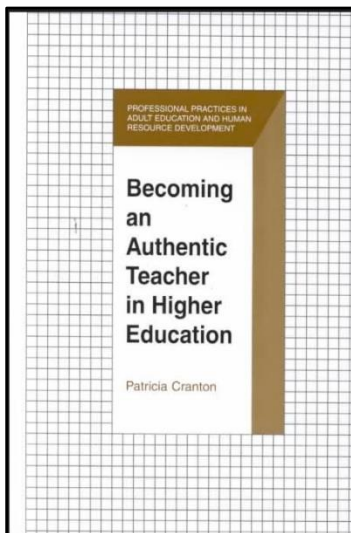
In the first exercise, students had to first write a structured report on the use of [GeoInquiries](#) and [storymaps](#) and then they had to evaluate the reports from two of their peers. They were also encouraged to add constructive comments to their reviews. In the second exercise students had to evaluate maps that were created by their peers, and they also had to do a self-evaluation.

From a feedback questionnaire it was clear that most students (almost 95%) believed that they gave a fair assessment when evaluating the submissions of fellow students, yet some students were unhappy with the reviews and marks that they received. Despite the challenges encountered, I believe that this type of evaluation may be used constructively as part of a varied assessment scheme.

Becoming an authentic teacher in higher education # *book review* [Ina Louw \(Department for Education Innovation\)](#)



In this book (published in 2001) Patricia Cranton, an academic developer, collected evidence about different colleagues over decades and shares practical examples and activities to assist readers to get to know themselves better. She believes that there are “contradictory ways of being a good teacher,” but then you need to understand yourself and be authentic.



Chapter 1 and 2 (Understand yourself & Understanding experiences and values) explore how you can get to know yourself better by knowing yourself and your psychological preferences (an excerpt from the key to the self-awareness activity can be seen in [appendix 1](#)). She wants to foster self-awareness and uses “the powerful influence of past experiences on your perception of our self and the significance of our cherished, but often unarticulated values” (an excerpt of the values can be seen in [appendix 2](#)). Four exercises assist the reader to better understanding.

In Chapter 3 (The good teacher) she states: “In trying to be everything a good teacher is supposed to be, we cannot be ourselves.” She offers four categories— “supported with theoretical foundations—that are broad enough to encompass all forms of teaching and yet establish distinctive divisions” ([quote](#)). In a three-part activity you can establish your own personal strength (an excerpt of the inventory can be seen in [appendix 3](#)), then reflect on how you came to have these strengths and in part three “why do these strengths matter?” The aim is to use the inventory’s results to recognise and use our personal strengths to improve our teaching. The key message is: “there is no ‘one size fits all’ plan for the perfect teacher, something that is reiterated throughout her book” ([quote](#)).

She continues in Chapter 4 (Self as teacher, teacher as Self) and explains how to integrate your “Self” into your teaching role (an excerpt of the two activities can be seen in [appendix 4](#)) and illustrate this in Chapter 5 (Teacher-self in profile) with four narratives. I found her three kinds of connections with students (Chapter 6, Connecting with students) very interesting—as “the protégé,” the “critic” and the “enemy.” There is an activity for each type of connection), but she concludes to discuss the “authentic voice in the group” (p 84).

In Chapter 7 (Teacher-Self in context) she discusses the four levels of context relevant to teaching practice and concludes with the dilemma of the “paradoxical responsibilities of promoting conformity and fostering critical thinking” (p 99). The final chapter (The transforming teacher) highlights the fact that your personal and professional beings are integrated. We should “grow towards a clearer perception of ourselves as individuals,” as that will influence our teaching (two activities are included).

The content from this book is ideal for a professional development session for those who are re-evaluating their teaching. It will be ideal for those who seek verification that they are on the right path or for those who want to make changes.

If you are interested to attend such a session, send an e-mail to ina.louw@up.ac.za to allow her to determine potential interest.

Two quotes have been taken from a review by D.C. Camin; the full review is available [here](#).

Passing the teaching baton # *classroom climate* [Jaco Visagie \(Department of Statistics\)](#)



For the past three years, I have been sharing my teaching responsibilities with various colleagues. I would teach a specific part of a course, in my case Statistics, and then my colleague would take over and teach the next part, and so on. I find that it is often quite difficult for students to switch between different lecturers that each have their own teaching style. Below I discuss the techniques that I found useful in aiding students with this transition.

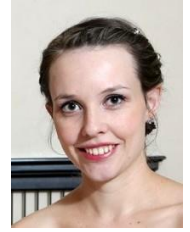
Different lecturers tends to emphasise different parts of the course material. This, perhaps unconscious, bias can be detrimental to student performance if it is not taken into account. As is the case with most lecturers, I tend to spend substantial amounts of time on topics that I find particularly interesting and enjoyable. As a result, I tend to assume that the students are well versed in these specific topics. However, my colleagues have often focussed less on certain topics than I would have preferred, meaning that I found the students ill prepared for the problems that I set them. There is also the matter of teaching style. For example, the level of interaction expected from students differs greatly between lecturers. If you are taking over from someone who expects less interaction than you do, then the students usually take some time to adjust to your teaching methods (even if you have taught them before).

If I may be so bold as to offer some practical advice based on my own experience and the feedback that I have received from students, I suggest the following. If you find yourself in the situation where you are sharing a course with a colleague, I suggest that you alternate as infrequently as possible. Initially we use to teach for one week each, but this was too confusing for the students (and ourselves). By the end of the three years we alternated only once per semester. A second piece of advice that I can offer is to give the students some time to adjust to the change when you take over. The first lecture that I present after taking over from a colleague contains no new course material. I use that lecture to ask the students what parts of the material covered by my colleague they focussed on and what they found most interesting; of course, I ask the relevant colleague the same questions, but I find it helpful to get feedback from the students as well. I also take some time to tell them what the “rules” in my class are and what I expect from them. At the end of this class, I try to briefly summarise the most important aspects of the material covered up to this point in time and to point out the importance of the material to come.

Switching between lecturers can be very challenging for students. However, I have found that bearing the difficulties pointed out above in mind can ease this transition considerably.

Using videos for lectures and feedback # *hybrid learning*

Janet van Niekerk (Department of Statistics)



Using technology for instruction in various forms has many advantages. Young adults are very inclined to use technology and different media in their learning process due to the influence of the modern world. Tertiary educators are thus encouraged to rethink their presentation of material to optimise the channel of communication to students. The reason why videos have not been used extensively in South Africa is due to the size of the videos and the constraint imposed by the available data and speed to download them.

The vision of UP is to be a fully hybrid university capitalizing on online learning. The most obvious way to achieve this, is to utilize videos. In 2017 I employed a system using videos for some lectures as well as feedback on assessment, practical illustrations and explanation of homework problems. The size of the videos is sufficiently small but maintains the high quality of video and audio. As an example, a 45 minute video can be of size 85MB. When comparing this to a movie of 90 minutes which is often of size >1GB, the video is at least 12 times smaller.

The software that I used to achieve this is [APowersoft](#). It is free to use and has built-in editing functionality which eases the use. This software captures the screen and voice of the presenter and is thus not dependent on any software used for lecturing. The web camera can be used in the video as well which enables the illustration of experiments or writing on a board, as part of the video.

The students provided very positive feedback since the implementation of the videos. They now receive feedback and instruction on a platform with which they are comfortable and familiar. The learning support provided in this way is of immeasurable value since contact hours are very limited to use for additional support.

This approach is not only applicable to Statistics courses, but all courses could benefit from this approach and it has been implemented in various courses across faculties.

[HowTo@NAS guide](#) · [YouTube video](#)

Practical submission and evaluation with Turnitin # *tried and tested*

Lou lle Ryan (Department of Consumer and Food Sciences)



In the Food Commodity and Evaluation second year subjects (VDS 210 and VDS 221), students are required to complete a practical document and submit it electronically on Turnitin in ClickUP. Peer assessment is used to evaluate these documents. Students are given a schedule for submission and peer-assessment dates to which they must adhere to as the system does not allow students to submit late documents. One student per practical group (consisting of two students) submits a practical document electronically. The Turnitin system assigns the student who submitted another group's practical document for peer-assessment. The students take turns in submitting and peer-assessing documents (e.g. week 1, student A submits and peer-assess; week 2, student B submits and peer-assess).

Pro's of the system: It's cost effective and environmental friendly (as there is no need to print the documents). Students can be creative and are able to use colour codes and pictures as they like. It assists towards the educational student centre approach that encourages students to accept responsibility for her / his academic progress. Students receive timely feedback that enables them to rectify mistakes before submitting the next document. It saves the invigilator assessment time and encourages more effective and efficient utilisation of the assistant lecturers.

"Snags" along the way: Irregularities in the peer-assessment have been detected. Students complain that their documents are not marked fairly. It has been noted that students give high marks to their peers. It sometimes happens that students who submit their documents in a timely manner do not get their documents peer-assessed due to other students who failed to submit their documents. Students that did not submit their documents can't participate in the peer-assessment. Students are unable to peer-assess after the due date,

which means that (a) the assistant lecturers have to do the peer-assessment or (b) students must peer-assess on the invigilators account, which is not a feasible option.

The teaching assistants now monitor the peer-assessment and marks are deducted for poorly (too low or high) peer-assessed practical documents. We are still searching for other viable solutions for the rest of the “snags.” Overall many of the issues we faced prior to the Turnitin system have been wrinkled out and we will continue utilising this tool and hope that in time we will be completely “snag” free.

Campaign to end plant blindness # *EndPlantBlindness*

[Nigel Barker and Angelique Kritzinger \(Department of Plant and Soil Sciences\)](#)



Plants use the sun’s energy to sustain almost all life on earth, yet most people tend to appreciate animals more than plants. The term “plant blindness” was coined in the late 90’s and refers to the inability to see or notice the plants in one’s own environment, and the incapability to recognize the importance of plants. If most people suffer from “plant blindness” and the fundamental role that plants play in maintaining life, the general public is not likely to agree that plant research and plant conservation is amongst the most crucial issues that face society. For more on plant blindness read The Conversation Africa article [here](#).

In a bid to combat plant blindness and give students the opportunity to participate in an extramural learning activity, the Department of Plant and Soil Sciences launched a campaign in the form of a video competition, open to staff and students associated with the Department. The videos had to be a maximum of 3 minutes and

showcase plants and the Department in a positive light. A small panel composing a mix of plant scientists, marketing and media people and educators judged the videos and score them on creativity, relevance and the potential impact they could have on public awareness and alleviating plant blindness. Apart from raising public awareness, the opportunity to make videos gave the students a chance to develop multimodal literacy, do problem solving and to learn more about the topic of plant blindness.



The winning videos received prizes, kindly sponsored by Prof Potgieter (Deputy Dean: Teaching and Learning) and all admissions deemed suitable were also uploaded onto the departmental website and other social media platforms. The [winning video](#) was submitted by Richard Hay.

The campaign will be continued in 2019 the format of which will be announced in due course.

Three apps to get you started in planning your module # *technology review*

[Mpho Thukane \(Department for Education Innovation\)](#)



There are a myriad of applications out there that one can use to support teaching and learning. In this issue I am introducing you to three apps that you can use not only in planning of content delivery, learning outcomes as well as assessment activities in your modules, they also help support student learning. The apps that I am reviewing are (to learn more about each application please click on the name):

1. The [HookEd SOLO apps](#) are based on the [Structure of Observed Learning Outcomes \(SOLO\)](#) which provides a simple, reliable and robust model for three levels of understanding—surface, deep and conceptual. The SOLO model enables students to self-assess the depth of learning outcomes for different

tasks, improve student learning outcomes, raise student confidence, increase student engagement, and create self-regulated learners. There are different SOLO apps, the following are freely available: [SOLO Symbol Generator](#), [SOLO Learning Intention Generator](#), [SOLO Self-Assessment Tool](#), [SOLO Functioning Knowledge Rubric Generator](#), [SOLO Declarative Knowledge Rubric Generator](#).

2. The [Learning Designer Tool](#) helps teachers and lecturers to design teaching and learning activities and to share their learning designs with each other. It was developed by a team led by Diana Laurillard at the UCL Knowledge Lab and is free for anyone to use. Please note users will have to [register](#) a free account. What is great about this tool is that it also provides feedback on your design by showing the proportion of each learning type in your design in a pie chart. The six learning types are: Read/Write/Listen (or Acquisition), Inquiry, Practice, Production, Discussion and Collaboration. Also see [User Guide and Video Tutorials](#).
3. The [RICE Academic Workload Estimator](#) allows instructors to estimate the amount of time they can reasonably expect students to complete an assignment. The question should be asked when designing an assignment. It is impossible to estimate how long students will take to complete an assignment without getting into the details of the assignment. Click [here](#) for more information on how the creators arrived at their estimates.

Please feel free to explore these applications; you are welcome to contact me if unsure. While e-Education advocates use of open software applications that can be used to support teaching and learning, you are encouraged to familiarise yourself with the developers' terms of use. Wishing you all the best as you innovate your teaching and taking it to greater heights. Until next time.

Weekly "podcast" for second year analysis *# trying out* [Rory Biggs \(Department of Mathematics and Applied Mathematics\)](#)



As a frequent listener of podcasts (especially while driving to work), it occurred to me that a weekly audio segment (5-10mins) of discussion between the lecturing staff could be an excellent means of enriching a module: It would present the opportunity to reflect on the past week's work, to discuss the upcoming week's work, and to frame all of this in a wider context.



I settled on trying this idea out last year in our second year analysis module (which I was coordinating). The lecturing team (Eder Kikianty, Belayneh Yizengaw, and myself) would anyway have had to have a weekly meeting—we could simply extend this meeting by 10 minutes to make a recording. Both Eder and Belayneh were very keen on this idea; we had a lot of fun and ultimately recorded 13 episodes!

Some student feedback (54 students were surveyed) reported the usefulness of this podcast as follows: 20% not useful, 40% neutral, 20% somewhat useful, and 20% very useful. There seems to have been a small number of dedicated listeners (about 40 out of the 350 students enrolled) and a surprisingly long tail of activity (students were listening to the segments weeks after they were published). My impression is that just the fact that this podcast was available made the learning environment more supportive. It also exposed our students to some dynamic and interesting discussions on the nature of our module (and mathematics more generally).

On the technical side, I invested in a microphone (to have a reasonable audio quality) and spent a little time getting to know [Audacity](#) (a free and open-source digital audio editor and recording application). The segments were uploaded to [SoundCloud](#) (an online audio distribution platform) and private links were then shared weekly via clickUP announcements (and on a dedicated clickUP page).



Student support collaboration workshop # *student success matters!*

Elandri de Bruyn (Deputy dean's office)

On Friday 21 September 2018 the Faculty of Natural and Agricultural Sciences held its first annual "Student Support Collaboration" workshop. This initiative was undertaken by the Faculty Student Advisors in partnership with the Deputy Dean for Teaching and Learning, Prof Marietjie Potgieter. The aim of the event was to provide a platform for the Faculty Student Advisors, the Student Admin, the newly appointed Academic Advisors and the NATHouse Executive Committee members to clarify roles of all the sections to advance undergraduate student success at NAS.



The Faculty Student Advisors with the Deputy Dean for Teaching and Learning. From the left: Ms Boitumela Seema, Ms Dolly Ayob, Prof Marietjie Potgieter, Mr Mpho Mmado and Ms Erna Gerrys.

The workshop kicked off with an introduction session by Prof Potgieter. There was an opportunity for the Student Advisors to share their daily experiences and identified the short fall areas where they need the assistance of the Academic Advisors. Thereafter the Student Admin took the floor and introduced their team that are working with the undergraduate degrees. The Student Admin also took the opportunity to share some of the challenges they face regularly.

To facilitate productive discussions, the attendees were grouped to have Student Advisors, Academic Advisors, Student Administrators and NATHouse representatives for the same cluster of disciplines grouped together. During the discussions the Academic Advisors defined their roles and engaged in

asking questions as well as providing possible solutions to obstacles that are currently being faced. To close Prof Potgieter allowed each table to give summative feedback.

This initiative is the first of many more to come because Student Success Matters! The contact details of your FSA is [here](#).

Invitation to contribute # *dare to share*

Do you have a new teaching innovation you are trying out? Have you been doing something tried and tested for years to engage with students? Has some issue been on your mind of late? Perhaps you have found a way to streamline some aspect of your course saving you valuable time? Please share your thoughts with our teaching and learning community through this bulletin; we welcome contributions from all faculties.

Kindly keep the style of this bulletin (and intended audience) in mind, aiming for a short piece (150-300 words). Find our guidelines [here](#). Submissions can be emailed to Ina Louw (ina.louw@up.ac.za); your piece will be (lightly) edited for inclusion in the next bulletin.

General queries or comments regarding this bulletin can also be directed to Ina Louw. Technical queries or questions regarding formatting, file formats, links, etc. can be directed to Rory Biggs (rory.biggs@up.ac.za).

All bulletins will be archived [here](#), on the [NAS faculty website](#), and on the [Fly@NAS clickUP site](#).

