# Respondent 21 Interview Summery

Field of research: Ecology

## Question 1

* No
* There is a lack of any sense of the importance of conservation
* All students are Zulu students, which means they come from a background where plants are utilized
* This brings in utilitarian perspective and not a conservation perspective
* Conservation becomes an issue when muti plants are becoming scarce
* Most of these students want to study micro or biochemistry to study the medicinal properties of these plants or the agricultural side where these plants can be used for economic profit

## Question 2

* No
* There are more students than they have the capacity for
* Not many of them actually want to be studying botany
* Dual major programme forces them to take a subject that they are not interested in
* Inflated numbers are driven by university economics and funding from government
* Most students want to study biochemistry and micro because that’s where they see money and status
* Only the best students get in for this and then they have to take something else which could end up being botany
* Need to try and show students there are job opportunities in botany and in government
* Try to help strongest students get jobs

## Question 3

* Broad approach
* Include the classical components of botany such as morphology, anatomy, ecology etc
* Cell biology and genetics should be added if they are not covered in a general biology module

## Question 4

* Categories are vague, stick to traditional botany subsections like morphology, anatomy etc
* Often lecturers are specialized so narrowly that they can’t teach broad subjects like anatomy or morphology and so they are given free rein to lecture whatever they feel like under these broad categories instead of giving the students a solid foundation
* Less vague categories help keep the focus and the lecturers in check with what they have been tasked to teach
* Top two: ecology and plant diversity
* South African plant diversity is a really good way to get people fired up and excited about botany
* Starting with something like really hardcore anatomy is really boring
* We should start with the more interesting things

## Question 5

* . Process of science: In this age of social media, it is important for a student to understand the difference between data derived findings and agenda driven opinion
* b. Interdisciplinary nature of science: Too many young students decide what they want to specialise in for the rest of their careers before they have a well-rounded understanding of the number of scientific fields that have profound impacts on their pet-interest.
* f. Understand and interpret data: Although the level of data handling and interpretation at first year level does not have to be very advanced, it is very important to start and develop this critical skill as early as possible.
* g. Quantitative competency (Statistics for the life sciences): Students need to be made aware of the value of good data analysis and dangers of poor data handling as early within their studies as possible.
* Others can be added later
* Top two: process of science and interdisciplinary nature of science
* Data can come a bit later
* They need to understand the fundamental building blocks of science and understand that its data that needs to do the talking so that they can get out if they don’t like that

## Question 6

* Evolution: Students should first learn what we have now, then later learn how current patterns and processes came about. Without the bigger picture of what we have now, the complex picture of evolutionary patterns and processes make very little sense. At a later level of education, these evolutionary patterns and processes become critically important.
* Integration of science with society: Too complex. A student should first learn how to form scientifically derived conclusions before they should be confused with social / agenda driven / political debate on the social digestibility / tolerance for specific scientific fields.
* Communication: First arm the student with information, then teach him to convey it to an audience. The current trends driven by social media encourages people to drive their agendas with unsubstantiated opinion instead of empirical data.
* Collaboration: A student should first learn to work independently and take responsibility for their part / contribution, before they are encouraged to work collaborative on projects.

## Question 7

* Yes, driven down academics throats all the time
* Question misunderstood

## Question 8

* Drive to change scientific programmes is unnecessary
* Higher levels should be more aware of current trends but not NB in first year
* Teach the basics before you try teaching the higher-level stuff
* The basics of structure and function in the plant kingdom have not changed dramatically in recent years
* Agrees that we should be teaching in a more African context, making what we teach locally applicable
* Examples must be country specific
* Shouldn’t be moving away from classical botany to highly technological advancements in first year

## Question 9

* Go back to the basics

## Question 10

* Drive to change scientific programmes is unnecessary
* Higher levels should be more aware of current trends but not NB in first year
* Teach the basics before you try teaching the higher-level stuff
* The basics of structure and function in the plant kingdom have not changed dramatically in recent years

## Question 11

* Don’t
* Go back to basics

## Question 12

* Very important
* Large number of students makes it hard to run sensible pracs