Communicating @ a Distance

For the sake of Effective Teaching and Learning

Identity
Mastery
Legacy

Prof Ignatius G.P. Gous

College of Human Sciences,
University of South Africa
gousigp@unisa.ac.za

Define tomorrow.

UNISA | college of human sciences

The **Goal** of Communication in (Distance) Education

A guides **B** to **C** by means of **D** (and not **E**)

The Question :

A guides **B** *(Who?)*

to **C** (*What?*)

by means of **D** (and not **E**) *(How?)*

My Context:

Africa

GLOlmsted c2013

University of South Africa – Distance Education – 400 000 students

Unisa is Africa's leading distance learning institution nurturing inspiring leaders of tomorrow. We are a reputable, comprehensive, flexible and accessible Open Distance Learning institution that is motivating a future generation. We offer internationally accredited qualifications and have world-class resources that inspire learners to create meaningful futures on their own terms.

21st Century Challenges

- Firstly, there is just **too much to know and learn**. According to Eric Schmidt, the CEO of Google, there is an over-supply of information, with information doubling every second day.

- There is also a **democratisation of information**, in the sense that it is easily accessible to everyone who wants to access it. It means learners are able to know more about something than their teachers.

- Add to this the **epidemic of excellence, quality and performance**, with nobody waiting for anybody who might be lagging behind.

Implications for teaching and learning

- Learners need to have the ability to **master masses of information** in short times – *binge learning*, as it were.

- It also means that learners need to be able to **discern, evaluate and weigh information** as to its quality and reliability. Lots of available information also brings along lots of useless and plain erroneous information.

- In all of this learners need to master the huge volumes of reliable information available, while at the same time mastering the ability to **change information into useable knowledge** to grapple with relevant issues.

Teaching needs to address these challenges and implications

- The realities are, however, that **teaching often still is archaic** in the sense that it mainly focusses on the mere mastery of facts, which is necessary, but not sufficient to address the realities of our times.

- Where there are attempts to transform teaching, it is sometimes **based on pop psychology and neuro-myths**, and might do more harm than good.

- It is also true that there is solid research about minds, brain and education available, but often these **research results are hidden from practical application** in the real life situations where it is needed.

Is it possible and effective at a Distance?

The Methodologies

- Teaching and Learning should be Highly Theoretical
  - For valid results

- Teaching and Learning should be Extremely Practical
  - For real results

Who is A?

A

- Lecturer / Specialist

- Knowledgeable about discipline

- Knowledgeable about teaching

Methodologies to Know A

- Metacognition and self-reflection

- Continuous Professional Development (CPD)

- Valid theories, such as Mind, Brain, and Education Science

Dan Berrett, The Chronicle of Higher Education, February 5, 2012

- *A growing body of evidence from the classroom, coupled with emerging research in cognitive psychology and neuroscience, is **lending insight into how people learn**, but **teaching on most college campuses has not changed much**, several speakers said here at Harvard University at a daylong conference dedicated to teaching and learning.*

- *Too often, faculty members **teach according to habits and hunches**, said Carl E. Wieman, a Nobel Prize-winning physicist and associate director of the White House Office of Science and Technology Policy, who has extensively studied how to improve science education. In large part, the problem is that graduate students pursuing their **doctorates get little or no training in how students learn**. When these graduate students become faculty members, he said, they might think about the **content** they want students to learn, but **not the cognitive capabilities** they want them to develop.*

Take Home Message A

Keep Learning to be an

Effective Educator

Who is B?

B

- Learner

- @ a Distance

- Unique in terms of
  – Characteristics
  – Ability
  – Culture

Methodologies to Know B

- Questionnaires about Student Characteristics
- Multicultural and multi-contextual

MBES Research identified
Effective and Ineffective Study Strategies

- **Effective**

  - Practice testing
  - Varied Repetition
  - Application Oriented
  - Integration (self-explanation)
  - Mnemonic strategies (e.g. Memory Palace)
  - Sharing and Teaching
  - Mindfulness
  - Focus without multitasking
  - Interleaved, Spaced,

- **Moderate Utility**

  - Write concepts out
  - Old papers and memoranda
  - Mnemonics

- **Ineffective**

  - Read and re-read
  - Highlighting and Underlining
  - Summaries
  - Cramming

Students use **Ineffective** Study Strategies

Frequency

- Read and re-read
- Highlighting and Underlining
- Write concepts out
- Summaries
- Old papers and memoranda
- Mnemonics

- Cramming, seldom spaced,
- Never interleaved

Take Home Message B

Get to know your students

Teach them content,

combined with the ability to master content throughout their lives

What is C?

C

- Useable
  - Knowledge
  - Skills
  - Attitudes

- Ability to
  - Skill
  - Upskill
  - reskill

- Meaningful

Methodologies to Know C

- 21st Century Skills
- Relevance Theories

Workplace Learning

Decolonisation debate

What Industry Wants: Life-Long Learners – Skill, Reskill, Up-Skill

- Learning as a prerequisite for sustainable development of humanity is underscored in goal 4 of the **2030 Development goals**: "Ensure inclusive and quality education for all and **promote lifelong learning**."

- According to sub-goal 4.4 "By 2030, substantially increase the number of youth and adults who have **relevant skills**, including technical and vocational skills, for employment, decent jobs and entrepreneurship."

- The reason being an explicit goal, is because it is not happening and 103 million youth worldwide **lack basic literacy skills**, and more than 60 per cent of them are women

Workplace Learning

- When Frederick Taylor published his pioneering principles of scientific management in **1912**, the repetitive and mundane nature of most jobs required employees to think as little as possible. Breaking down each task into basic components and standardizing workers' behaviors to eliminate choice and flexibility could help managers turn employees into productive machines, albeit with alienated spirits.

- Fast forward to **the present** and we see that most jobs today demand the exact opposite from employees: the capacity to keep learning and developing new skills and expertise, even if they are not obviously linked to one's current job. As academic reviews have pointed out, people's employability – their ability to gain and maintain a desired job – no longer depends on what they already know, but on what they are likely to learn.

Workplace Learning

- In other words, higher career security is a function of employability, and that in turn depends on learnability. Thus Eric Schmidt notes that a major pillar in Google's recruitment strategy is to hire "learning animals," while EY recruiters observe that "to be a standout, candidates need to demonstrate technical knowledge in their discipline, but also a passion for asking the kind of insightful questions that have the power to unlock deeper insights and innovation for our clients."

- Sadly, most organizations have yet to wake up to this reality, so they continue to pay too much attention to academic qualifications and hard skills, as if what entry-level employees had learned during university actually equipped them for today's job market. Although learnability does boost academic performance, just because someone is job-ready when they obtain their educational credentials does not mean that they are also learning-ready.

Tomas Chamorro-Premuzic & Mara Swan **It's the Company's Job to Help Employees Learn** HBR July 18, 2016

Workplace Learning

- Since we now expect learning to be as simple and compelling as watching YouTube, hundreds of video-based content providers and MOOCs offer free bite-sized content for us to consume on our phones while sitting in the coffee shop or standing in the subway. But corporate learning management systems remain slow, hard to use, and difficult to maintain. They're getting in the way of employee development instead of supporting it.

- At the same time, the demand for learning is greater than ever: Bersin by Deloitte's latest research with Glassdoor shows that learning and career opportunities are the biggest drivers of employees' willingness to recommend their company as a great place to work for people under age 40.

Josh Bersin *Using Design Thinking to Embed Learning in Our Jobs.* **HBR,** July 25, 2016

What is the Goal of Learning?

DIKW
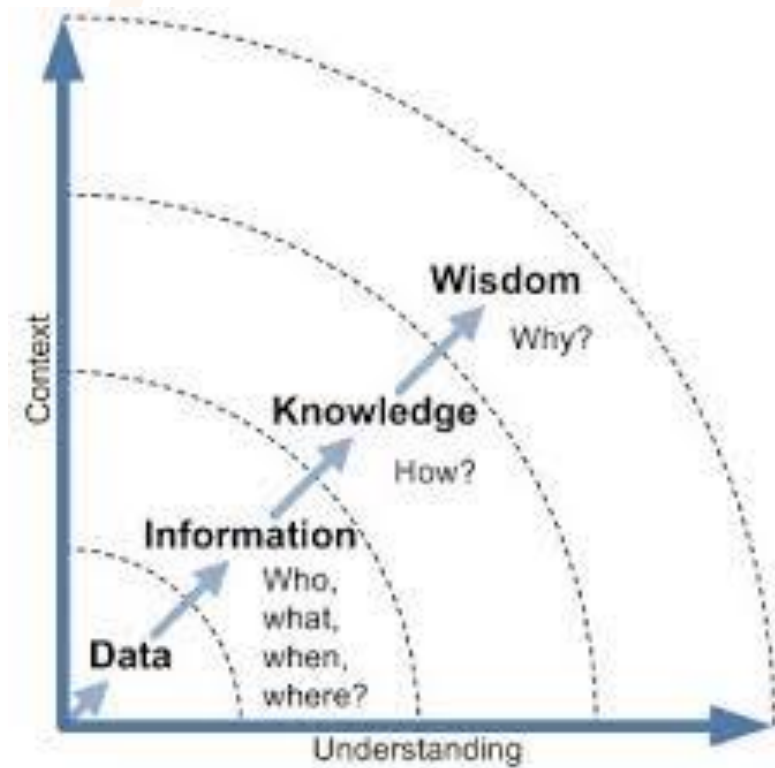
- Data
- Information
- Knowledge
- Wisdom

Take Home Message C

With thousands of students at a distance, it is impossible to give individualized attention to each and every student

Therefore: set assignments which will allow them to integrate the learning content to their contexts

How to do **D** (and not **E**)

D = Effective teaching

- Useable
  - Knowledge
  - Skills
  - Attitudes

- Ability to
  - Skill
  - Upskill
  - reskill

- Meaningful

E = Ineffective teaching

- Unrelated facts

- Only content, not ability to master content

- Detached

How to do **D** (and not **E**)

Vehicles of Teaching and Learning:

Face-to-Face
Correspondence
Online
Blended

D = Effective teaching

Using dependable, well-founded pedagogical strategies

- It is not about the vehicles
- Mind, Brain, and Education Science

E = Ineffective teaching

Using outdated neuromyths

- Learning styles, Left-brain-Right brain, etc.
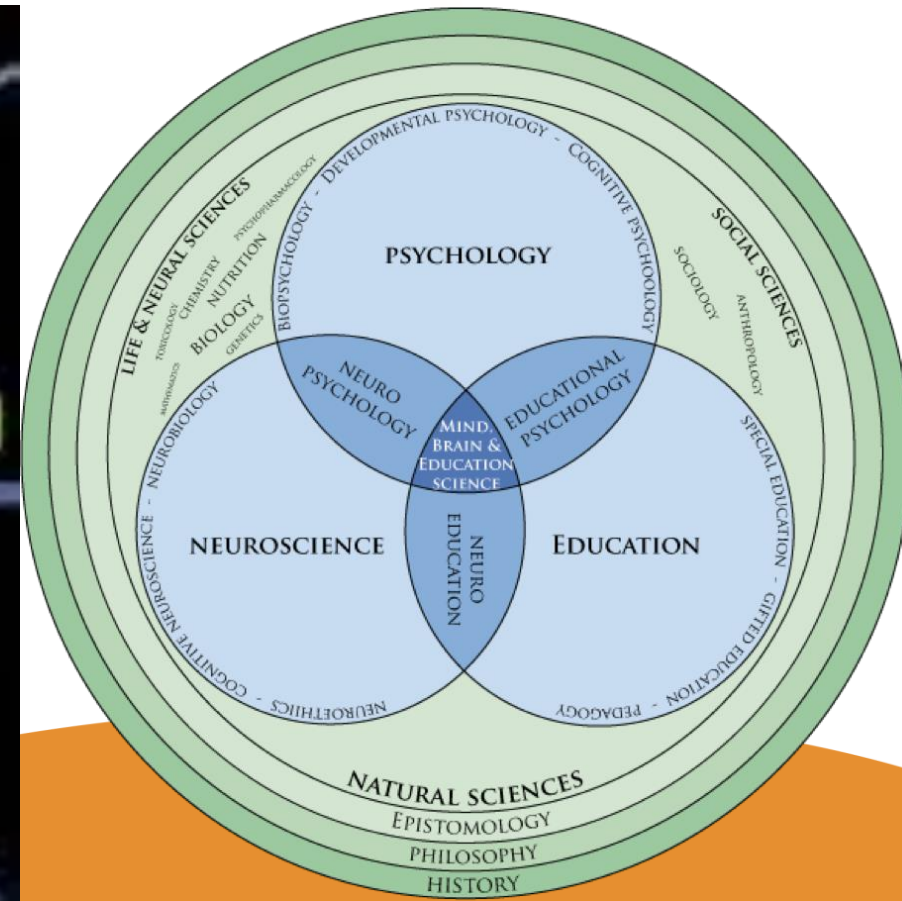
Challenge

- **Students** do not know how to learn,

  And

- **Lecturers** do not know how to teach their students how to learn

Mind, Brain and Education Science Defined

an interdisciplinary field that combines neuroscience, psychology and education to help create improved teaching methods and curricula.

- Theory and research
- Practical Application

Prof Tracy Tokuhama-Espinoza
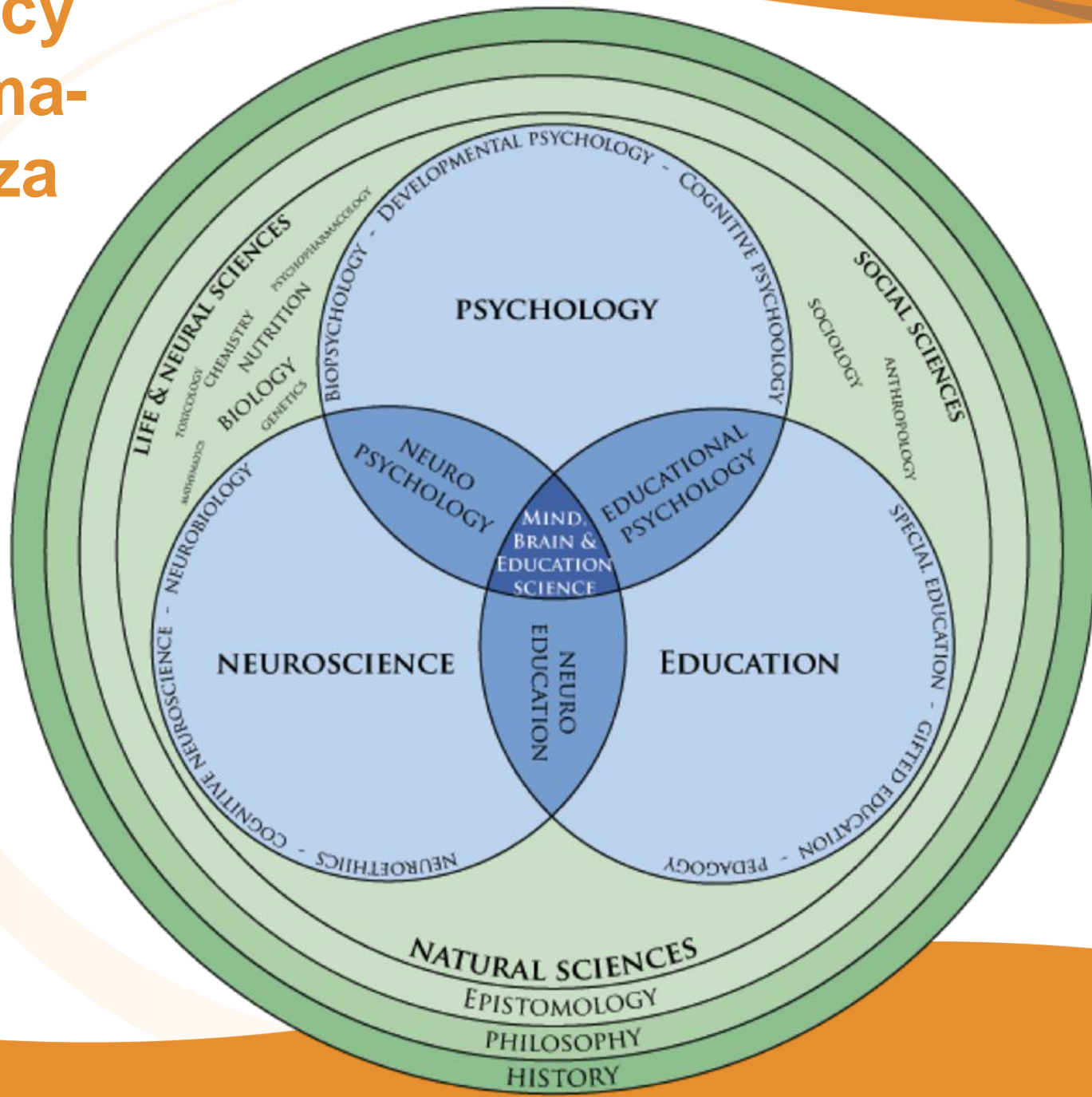
New Interdisciplinary field

- USA:
  - Harvard
  - Texas-Arlington
  - Stanford
- UK
  - Cambridge
- Europe
  - Ulm
  - Maastricht
- East
  - Japan

- IMBES

- Journal of Mind, Brain and Education

Theoretical Basis: Neuro-Constructivism

- Learning creates (partial) representations

- Competition, Cooperation, and Chronotopy
- Proactivity and Progressive Specialization

(1) constructivism (which views development as the progressive elaboration of increasingly complex structures),

(2) cognitive neuroscience (which aims to understand the neural mechanisms underlying behaviour),

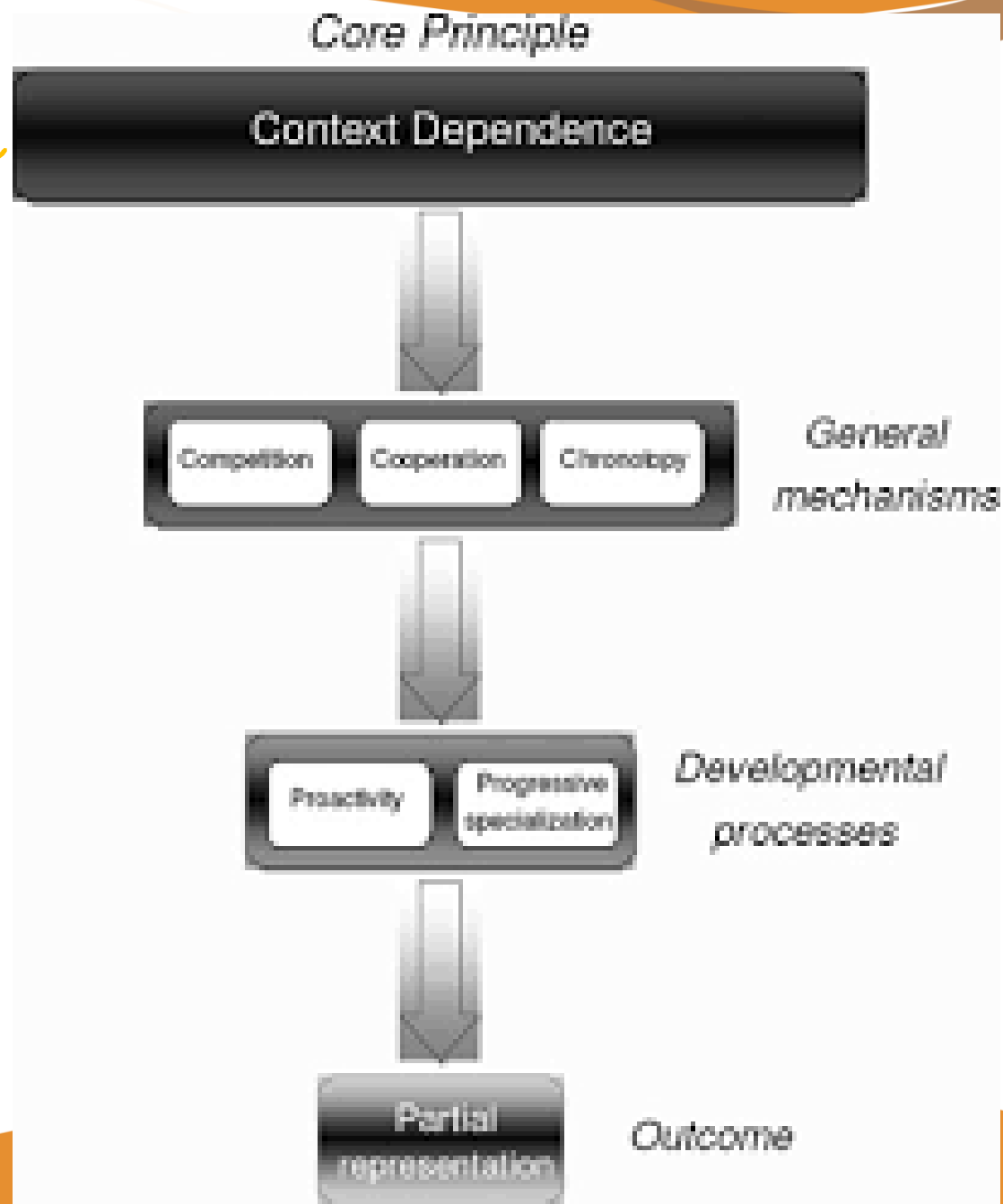- Terms: encellment, embrainment, and embodiment

Theory: Neuro-Constructivism
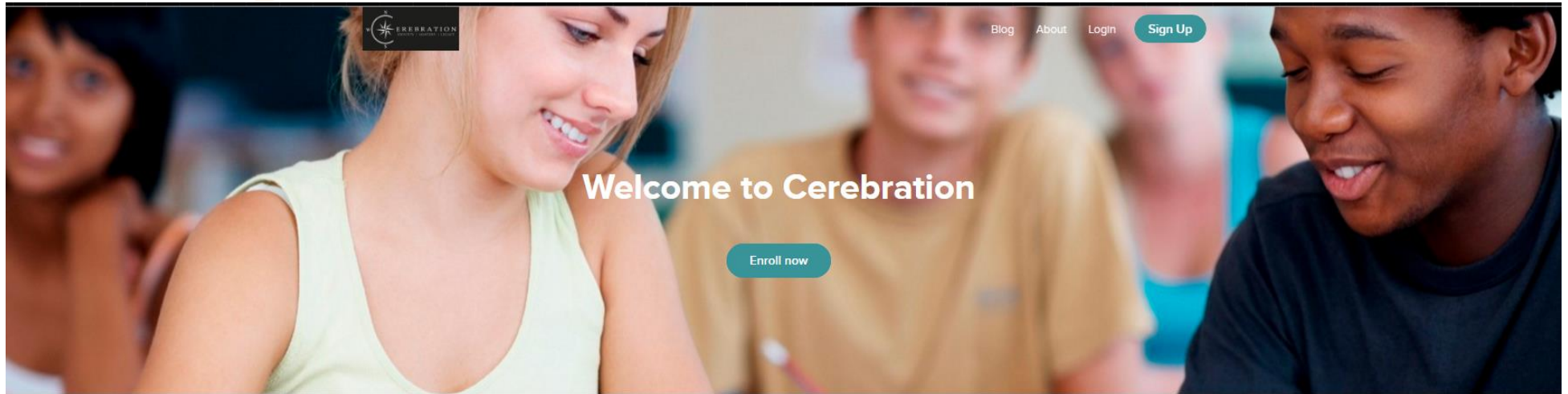
Genes

Brain

Representations

Behaviours

Context

Take Home message D (and not E)

- Lecturers and students are in need of a Comprehensive Holistic Program about teaching and learning, which are geared to develop the learner in terms of

  – Identity
  – Mastery
  – Legacy

Identity, Mastery, Legacy

http://cerebration.info

Welcome to Cerebration

Enroll now

Blog   About   Login   Sign Up

Featured Course

Propel-Learn Program

Prof. Ignatius Gous   R1,200

Ignatius Gous

gousigp@unisa.ac.za

+27 83 459 1902

www.cerebration.info

Thank you