

Access to Success AND Success to Access: Towards explicating a theory of change for the Pre-University Academy

Moneoang Leshota
Pre-University Academy

June 2024



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

What is a THEORY OF CHANGE

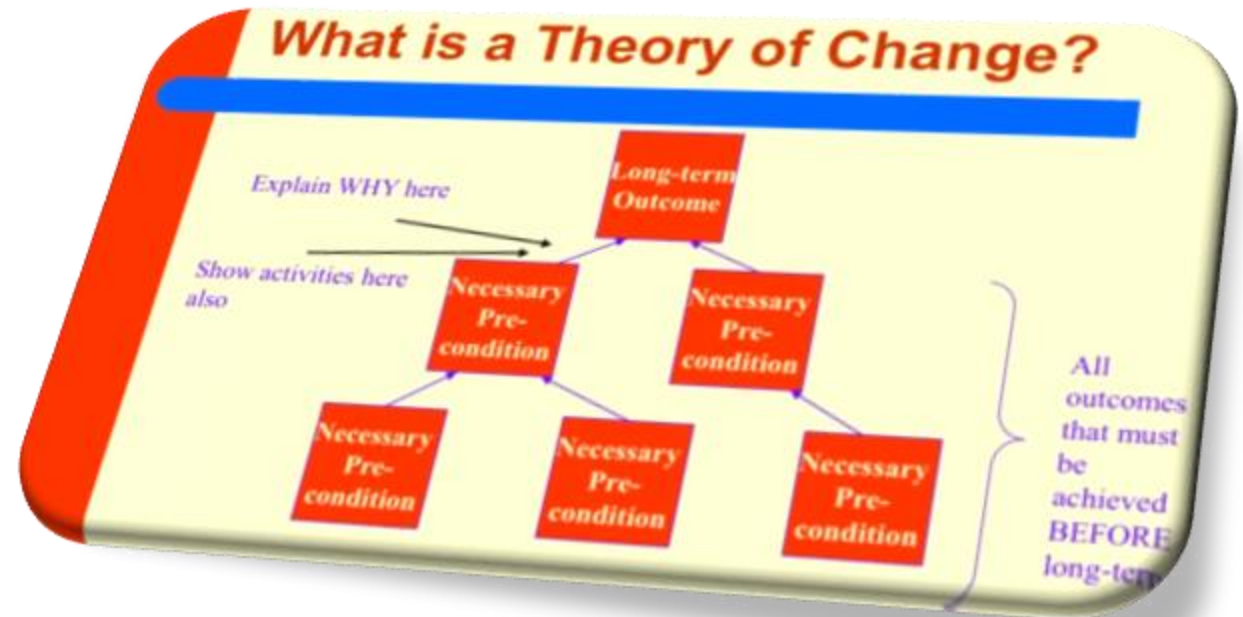
<https://www.enablersofchange.com.au/what-is-a-theory-of-change/>

Definition

1. An **explanation** or a **description** of the **pathway to change**
 - Outlines what the **preconditions** are to achieve our **long-term outcome**
 - Makes the **steps** to achieving change **explicit**

Definition

2. A **tool** to help us **explain how and why** a change program works
 - Highlights why it might **make a difference**
 - Helps us **design appropriate activities and evaluation**



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

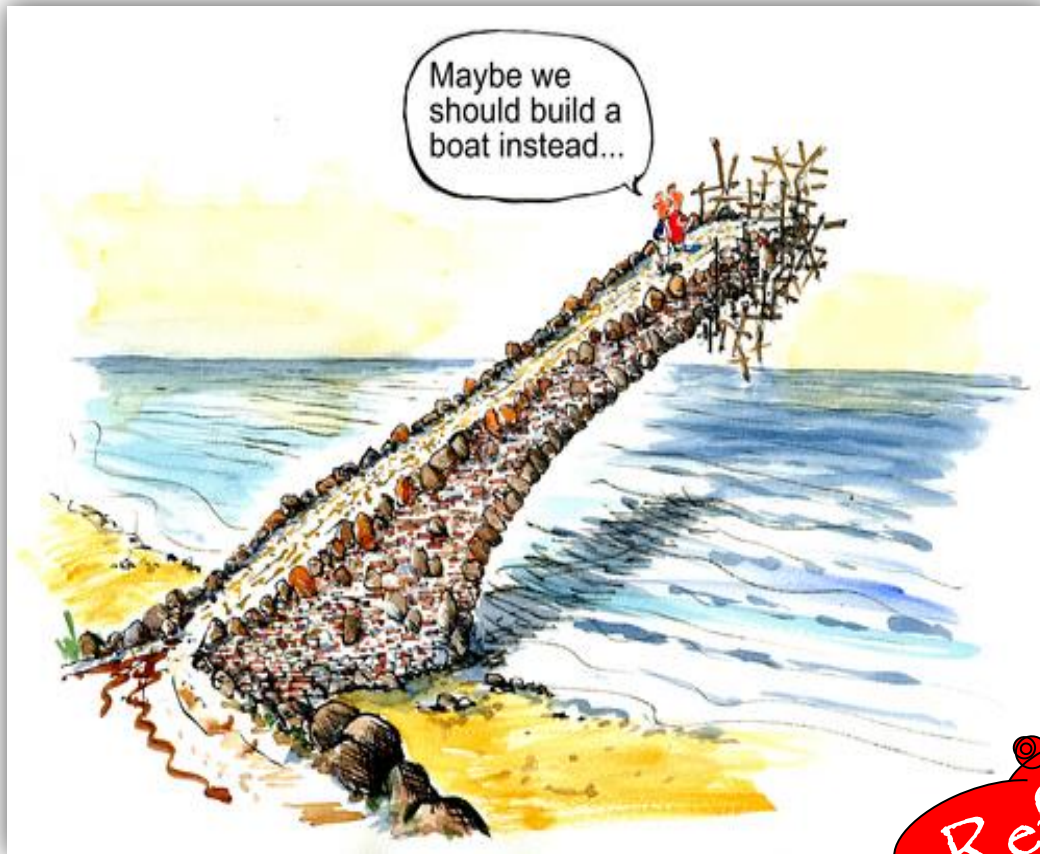
Make today matter

www.up.ac.za

What is a THEORY OF CHANGE

ActKnowledge

<https://www.theoryofchange.org/what-is-theory-of-change/>



Reflection

Definition

- Essentially a **comprehensive description and illustration** of how and why a **desired change** is expected to happen in a particular context
- It is focused on **“filling in”** the **“missing middle”** between what a change initiative does (ie its activities/interventions) and how these lead to **desired goals being achieved**



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

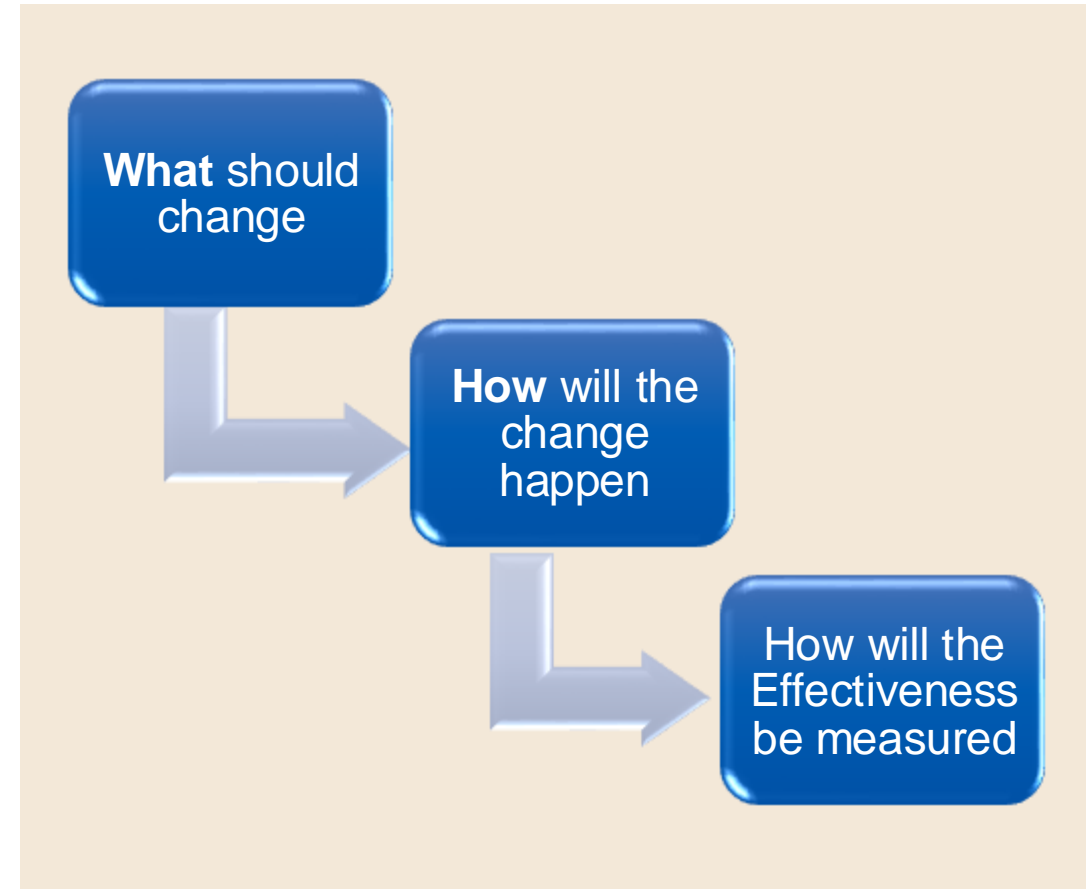
Make today matter

www.up.ac.za

The Pre-University Academy (PUA) “BROADENING ACADEMIC PATHWAYS”

1. Foster conceptual understanding of STEM-related fields with a view to gaining access to post-secondary institutions for students especially from impoverished backgrounds.
2. Develop personal skills which are required for access and success into education and the working environment.
3. Enhance academic and professional writing skills.
4. Develop a positive attitude towards science and enhance scientific skills
5. Develop a quality programme which is academically and financially sustainable

Theory of Change “ 3 Questions ”



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

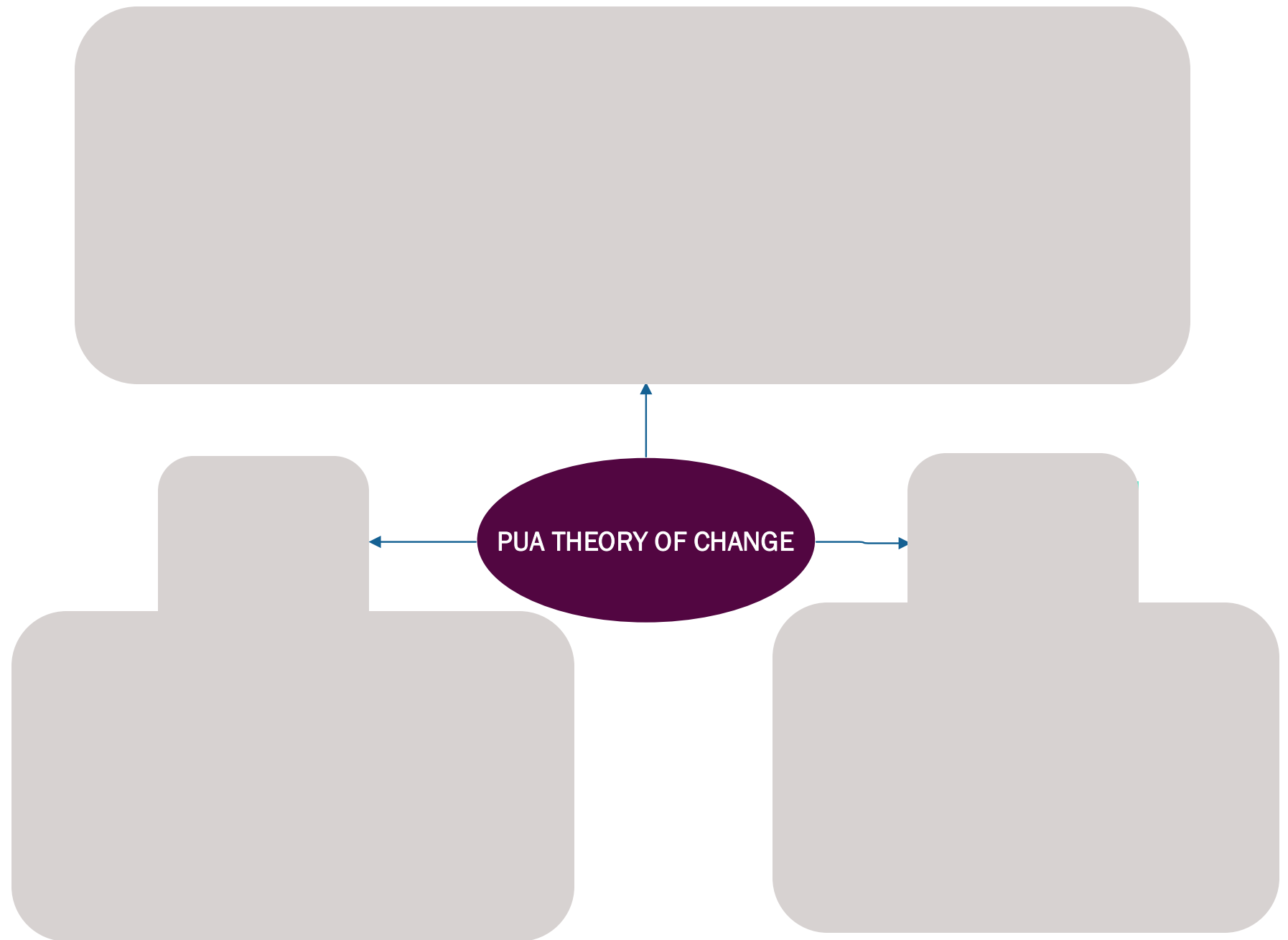
Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

TOC provides us with an understanding of the **landscape** and the **routes** and **distances** that we need to travel to get to our **destination** (IPAL)



Do the PUA Learners Feel the same about the CHANGE?

1. FOCUS GROUP DISCUSSIONS

- 12 highest performing learners, Grade 11, 2023, all from Quintile 5 schools
- 4 boys & 8 girls, separately

2. INDIVIDUAL INTERVIEWS

- 5 learners from Lower Quintile schools
- 3 available for interviews (2 girls & 1 boy)

3. QUESTIONS

- Impressions of the PUA so far
- Career aspirations
- Home and School environments



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

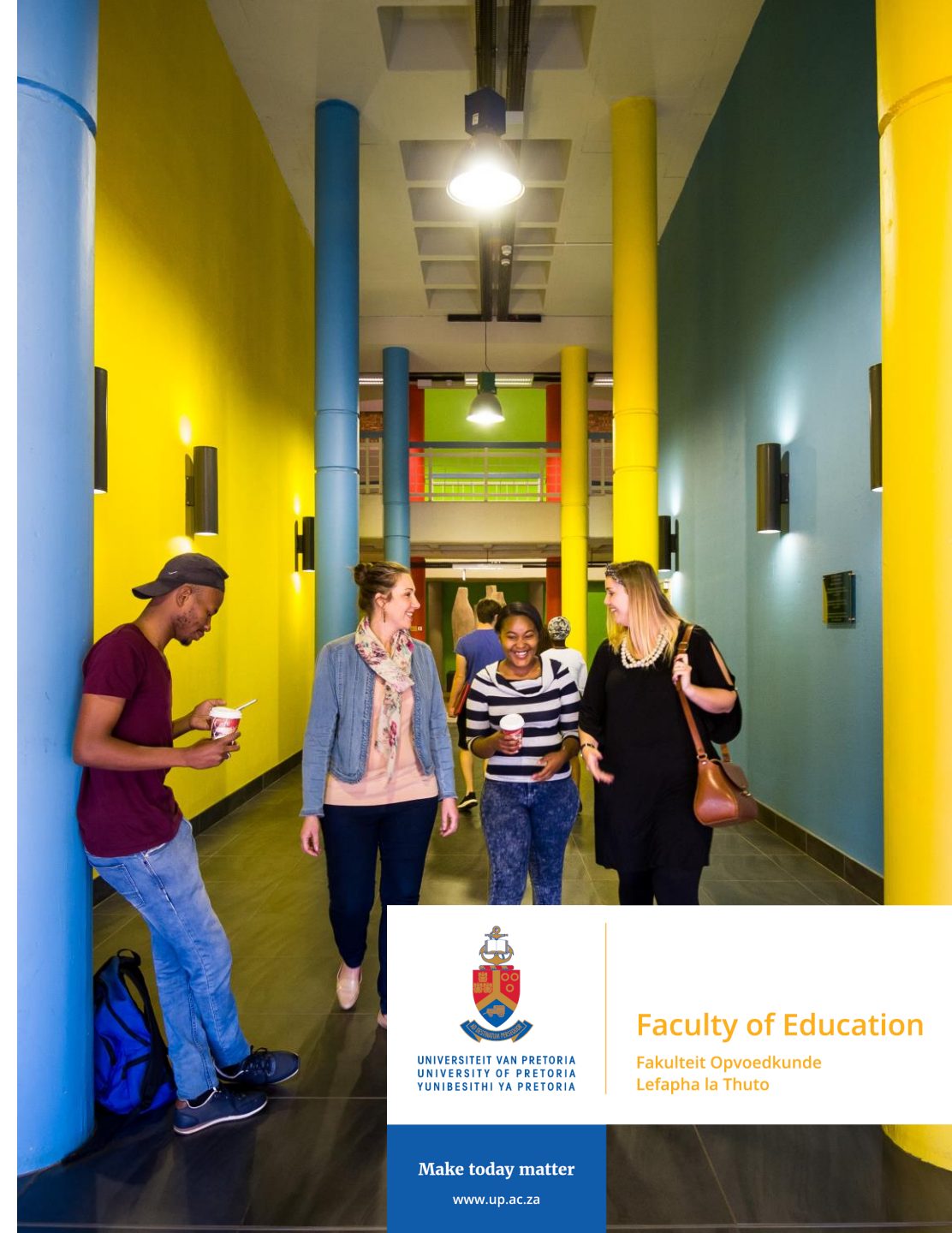
Make today matter

www.up.ac.za

THEORETICALLY:



The Science of Learning and Development (SoLD) Framework, Darling-Hammond et al (2020, p.98)



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

LEARNERS' VIEWS ABOUT THE PUA

Girls



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

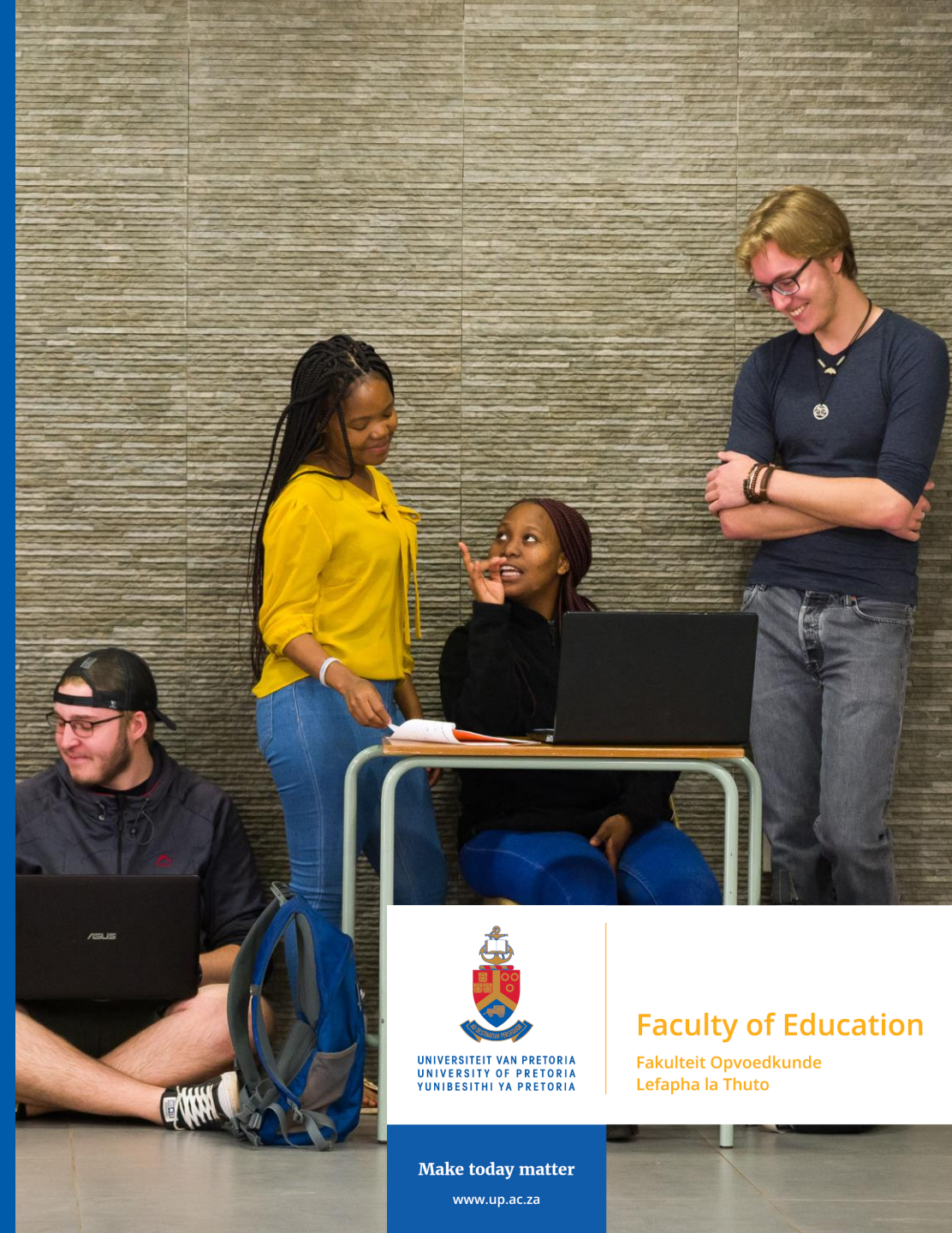
www.up.ac.za

“PUA goes into the depths of why it is we do something....and in school, we just get taught to do this, to do that, there is no why. There is no explanation. You just memorize and learn. But here, you learn that by engaging a further meaning and understanding”

“I do aspire to be an actuarial scientist.... I didnt know the requirements for an actuarial scientist. I was exposed to that...”

PUA did not only help with academic, but also psychologically ...to be able to deal with many tasks in a very short period of time...not only many tasks, but they are also demanding tasks. They demand a lot of my mind and application. So it enabled me to enhance my way of thinking.

So even the type of learning that is done over here, it's not like at school they'll tell us that any number to the power of zero is one. But here they took it down to the basics. I have a good foundation right now”



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

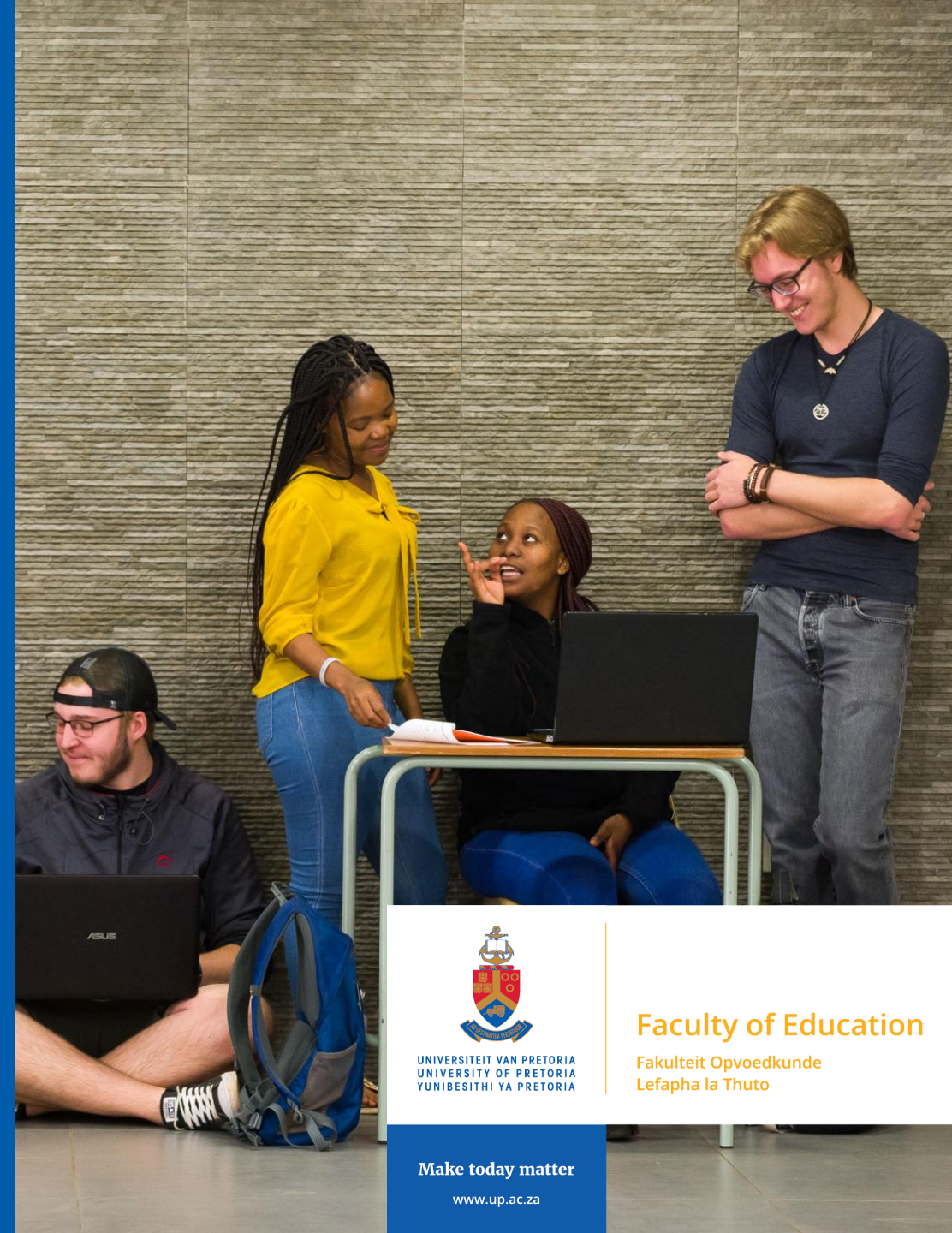
Make today matter

www.up.ac.za

“when I didn't understand something at school, I would ask PUA teacher and he would help me in the class ...
I think I've just fallen a bit lazy when it comes to the PUA more than I have at school....”

“So now we're not doing anything in Physics, it's Chemistry for the Physics. So basically, what we feel is, in Physics, there's nothing necessarily new that we're doing. It's just revision over and over again.”

“I think the reason why a lot of us don't want to come back next year is because of the amount of time it takes out of my Saturday. I usually get home at four, then I've got my own work to do and homework.I have to study for my test... It takes so much of my time. That's why I'm a bit reluctant...”



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

LEARNERS' VIEWS ABOUT THE PUA

Boys



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

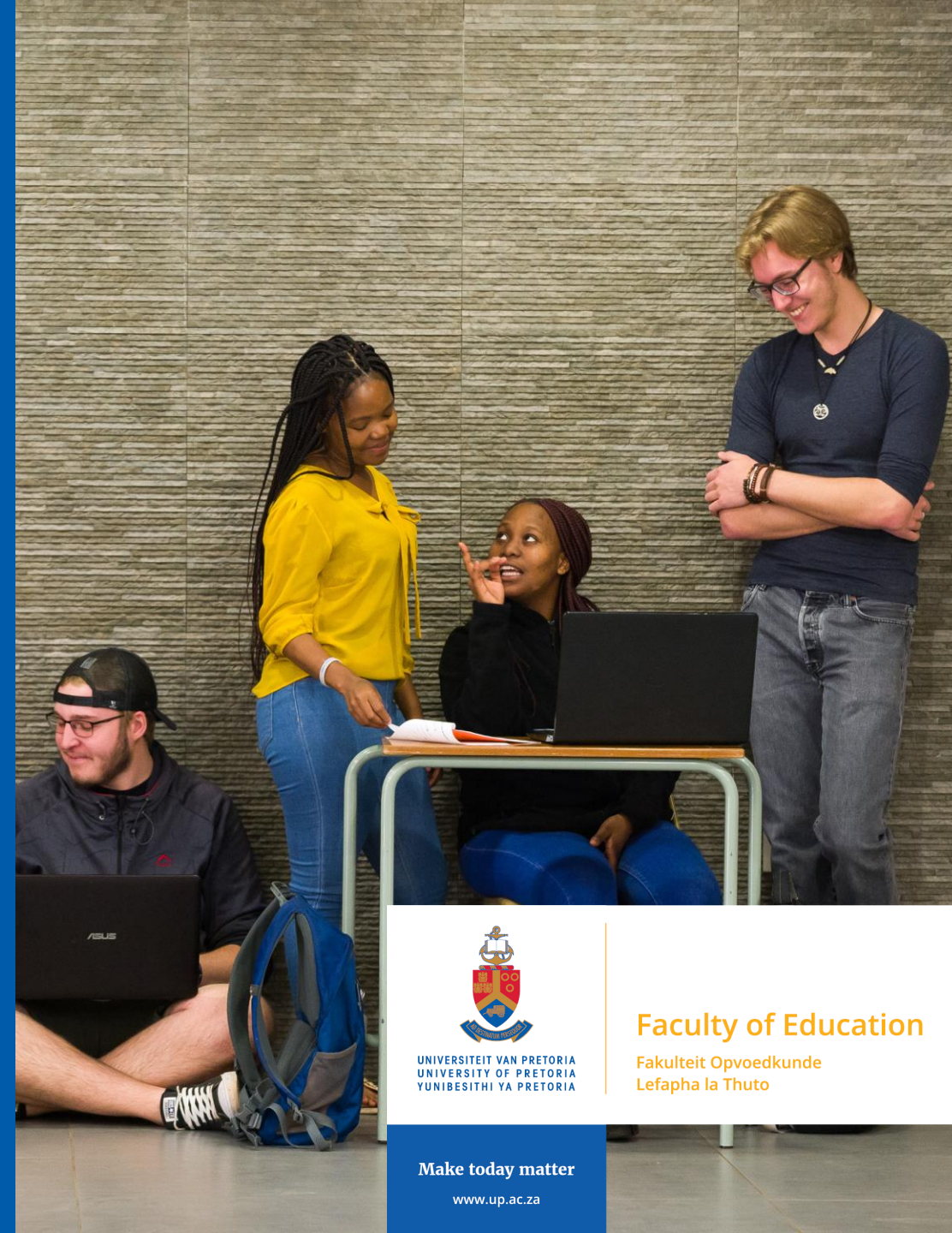
Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

“... everything was so new, so shiny. That's how I would expect a university student to walk into his first day of university. We were like, wow, this is good. We've got to do this. I am the smartest one in school. I'm going to get here and crash the world. And then you get here and you realize that's not how things are. That's when you have to start adapting.



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

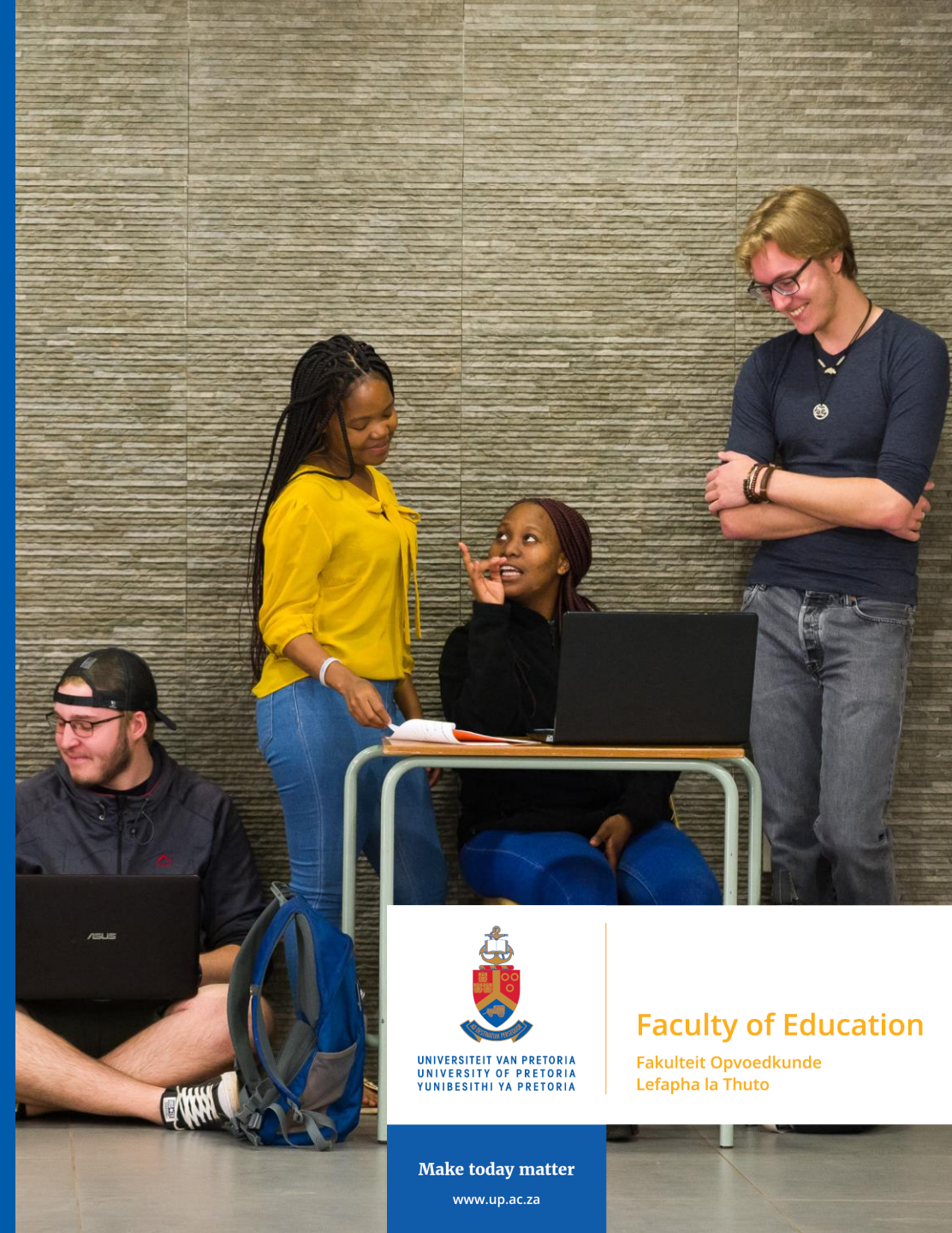
“Now you are no longer using formulae to solve. Now you have to explain it. You don't just use it. You have to say, why? Why, why, why? ... ”

“at school they'll say that any number to the power of zero is one. Here, it was, why is x to the power of zero one?

that just broadened every aspect of my thinking. I used to have a very condensed way of thinking. ...Additionally, the PUA exponentially increased my marks...”

“here the assessments are way harder. They test if I understand...at school, they test if I know this part. I can look at it and say, A, B, C and then I pass. But here, it asks, why is it A? Why is A before B? ...These assessments allow me to understand. And if I'm able to do these assessments here, it means I understand the work. Therefore, I can easily apply it to school and not just cram the work and forget it, because that won't help me in the future”

DEEP VS SURFACE LEARNING



Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

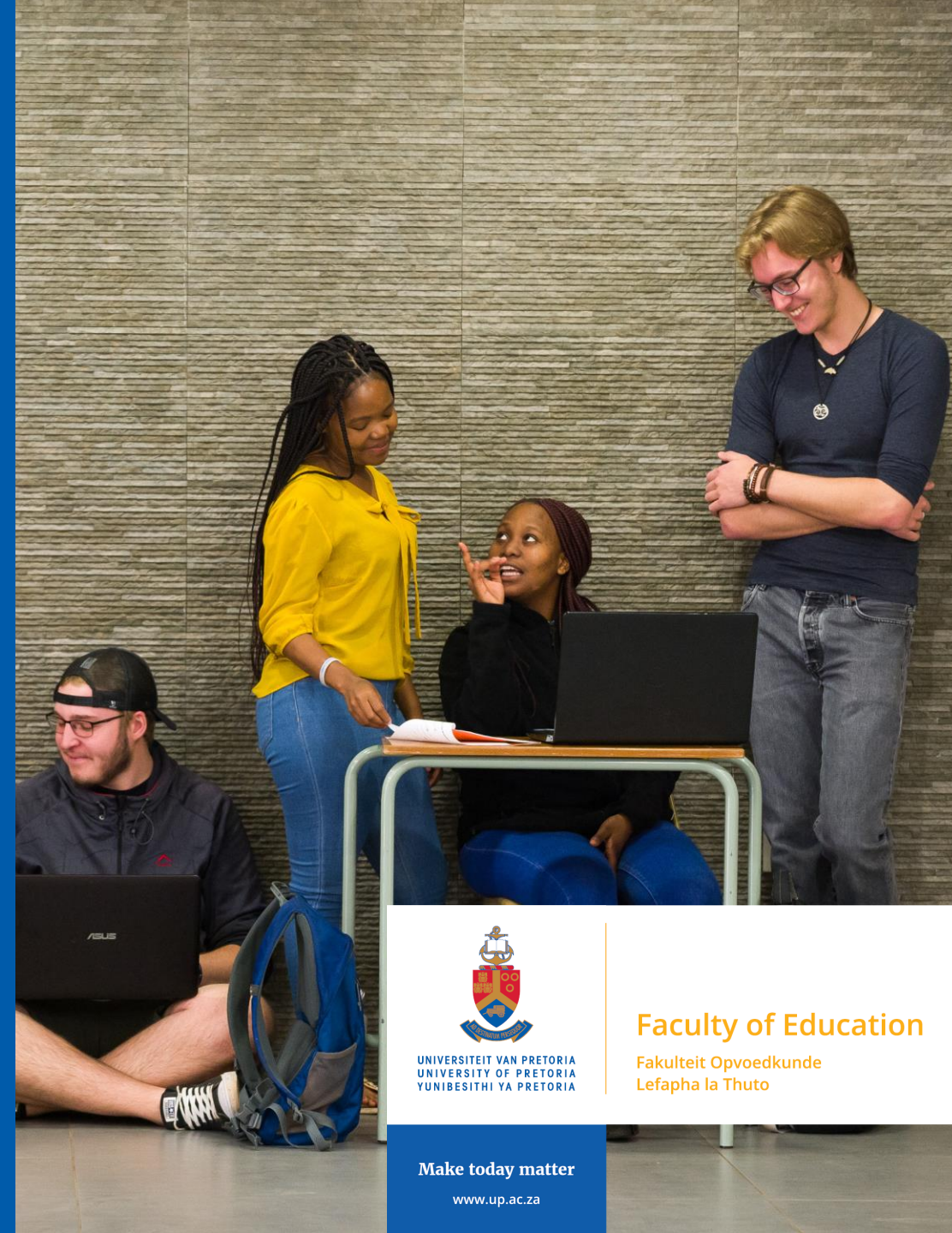
www.up.ac.za

‘I see myself studying mechanical engineering, and I believe that with the help of the PUA, I have all my weapons ready for that period of time, because the PUA has taught me to deal with many things at once. I see this as a learning curve. Because there'll be exams at UP and at school. And then I'll have to take time out of my Saturday to be able to do the most in all these areas of my life. And then I still have my own personal life.

“ at school last year, I won a total of five awards...physics...computing technology... life science... mathematics... and highest achievement rating.

... you would think that although the learners had more time than I did, they would have a greater advantage in obtaining more than I did. But because of the skill of being able to manage my time effectively and be able to work in a very tight schedule, that enabled me to achieve all those things”

TIME MANAGEMENT



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

“So, the PUA has been able to teach me about time management. We've been going over time and the importance of time because it's so important to never lose the time we have in our hands. Because it moves so quick. So, it's best to make the best of all the time we have now and improve on what we get.”

“ at school last year, I won a total of five awards...physics...computing technology... life science... mathematics... and highest achievement rating.

... you would think that although other learners had more time than I did, they would have a greater advantage in obtaining more than I did. But because of the skill of being able to manage my time effectively and be able to work in a very tight schedule, that enabled me to achieve all those things”

TIME MANAGEMENT



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

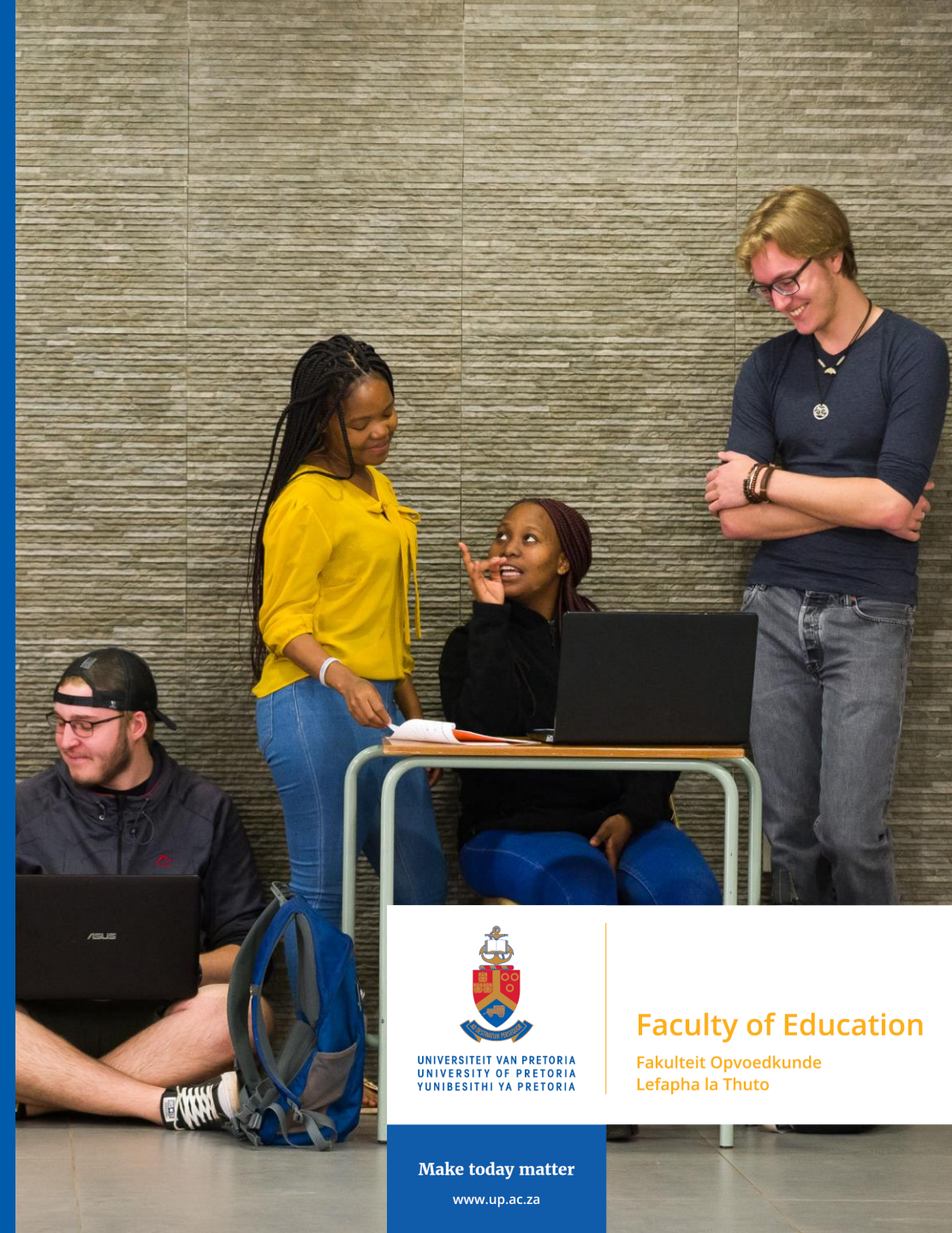
Make today matter

www.up.ac.za

“Both the stress and the good outcomes of it were all worth it because it somehow kind of made me a better person. It developed me to gain confidence and to see and to unlock all of my potential. So with the help of the PUA, I can see myself becoming like the person I want to be, I see myself as a surgeon”

“I am one of the top performers in school... but here, you have the top 160 out of those different top 10s. And it is nice because you have those people that you can speak to.

And also, one of the big things that I have enjoyed about this place, is the teachers”



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

LEARNERS' VIEWS ABOUT THE PUA

Quintile 1 to 3 Schools



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

LQ1

I felt very pressured with having to compete with other learners. But PUA explained everything from school. At school they have very little time to explain a topic. They just tell you it is like this and that. But when we come here the classes are longer so they explain “how” and “why” it is like that

What helped me focus on my school work more was the counselling session that we got here....(She) spoke about how to meet our goals, study according to our personality. That’s when I made the decision I work better at school... At home I can’t do much work



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

LQ2

At school they just tell you what you are going to write (in the exams), they don't tell us "why"...(here) they tell us all information, everything

*...
At school they just teach, they don't tell us about career*

PUA has introduced me to new things. For example, I did not know anything about computers... They actually motivated me... Coming here and seeing a university is like, I could be studying here...everytime coming here motivates me to never give up

It is not easy to study at home because of the noise...I would like to stay behind at school but our area is not safe...I just study under my blankets at night with a phone



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

LQ3

I really enjoy being here...I get to explore, its beautiful here...the venues...

I should not have chosen Science subjects at grade 10 because I like Accounting, and it is too late to go back

The teachers here are too fast for me. I don't interact with them much because they are always busy here than at school



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za

Access for Success & Success for Access: FOCUS ON DIVERSITY

From All Learners

- Appreciation of the conceptual understanding approach esp. in mathematics: the “why” of doing
- Appreciation of ‘other’ supports offered by the PUA

From the Girls

- Anxiety about Matric year and time spent at the PUA on Saturdays

From the Boys

- “Bring it on”: view hectic demands of time and content, motivation for time management and better preparation for university

From Lower Quintile Schools Learners

- Aesthetic factors: beautiful buildings; intrinsic motivation of just being at UP
- Counselling
- Space and time for studying



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

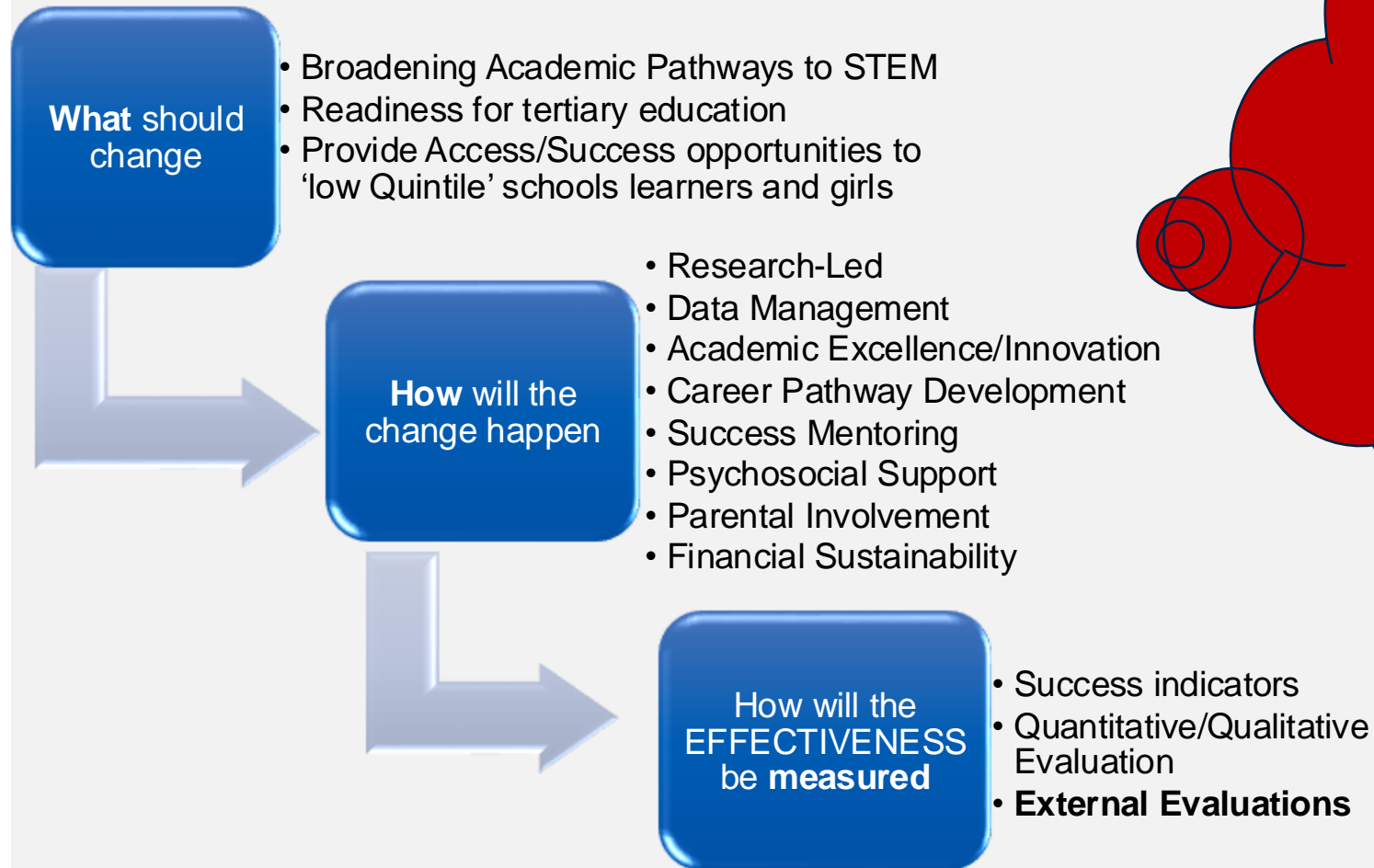
Make today matter

www.up.ac.za

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Explicating the TOC for the PUA: Conclusion



If DIVERSITY (gender, socio-economic etc) does not drive the Theory of Change for the PUA, we run a risk of “leaving others behind”

DEDICATION

This work is dedicated to Prof Nthabiseng Ogude for her vision: She founded the Pre-University Academy, thus ensuring that those who could not, now can

KEA LEBOHA



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Fakulteit Opvoedkunde
Lefapha la Thuto

Make today matter

www.up.ac.za