

Seeing the world on a small island: undergraduate research for sustainable societies

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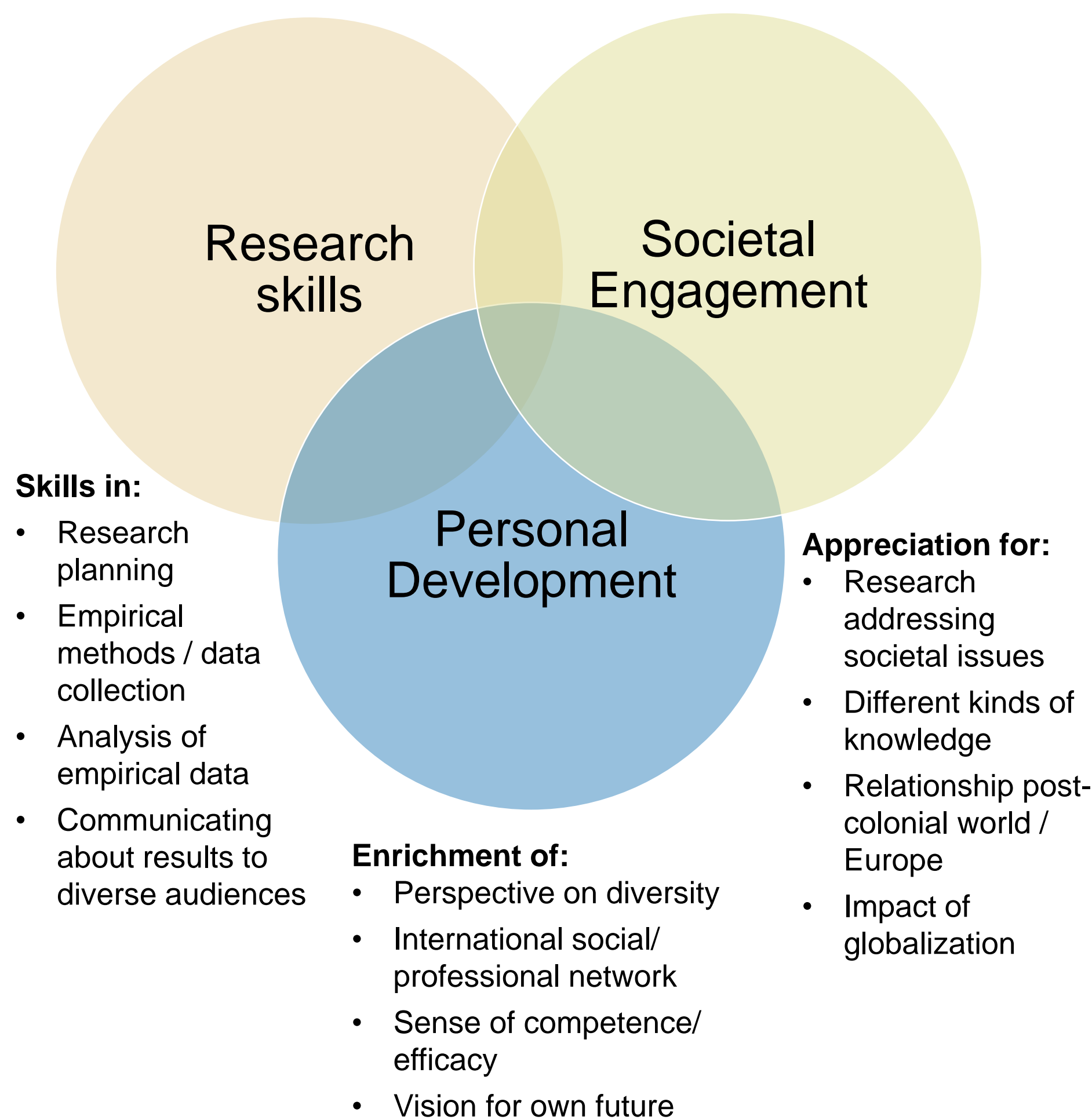
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Introduction

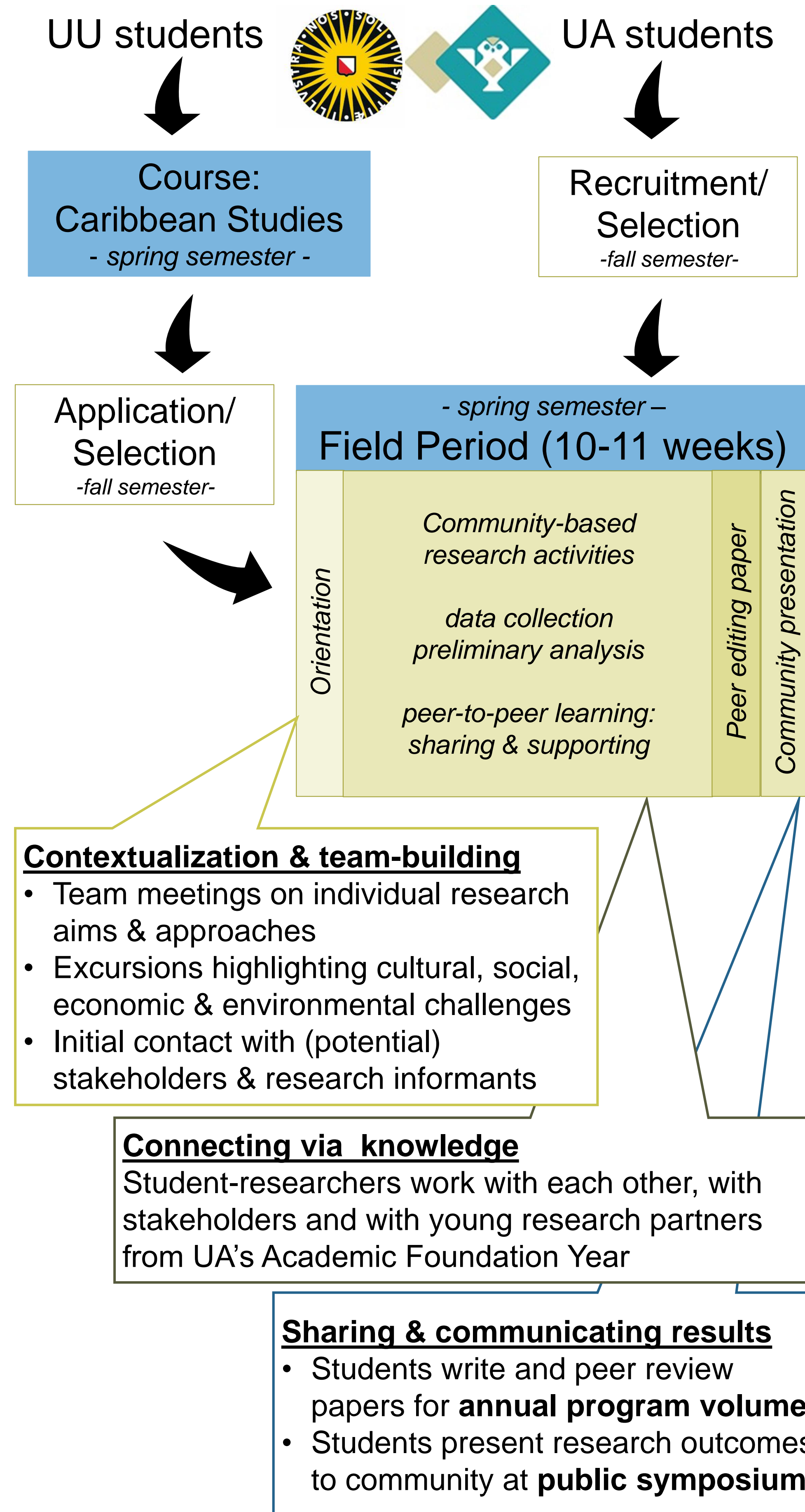
Our **undergraduate research** program stimulates bachelor students from the University of Aruba (UA) and Utrecht University (UU) students to engage with **societal challenges** and the world at large.

- Field site is Aruba, a **small island state** with cultural history, socioeconomic circumstances and a natural environment make it well-suited as a site for **SDG-related** field work in disciplines across the academic spectrum.
- Students employ principles of **community-based research** in diverse individual projects
- Students form an intercultural and interdisciplinary team and support each other's research process in a **peer-to-peer learning context**
- Cultural and intellectual exchange with each other and with stakeholders in the Aruban community enhances students' understanding of other cultures, their own society, and their role in the world.

Program Objectives



Program Design



Key Outcomes

Example student projects	SDGs	Year
The assessment of Aruba's shoreline pollution	13,14	2015
Employee perceptions of internal communication within the health sector	3, 17	2015
Diabetes management in a changing society	3	2016
The role of English in Aruba's linguistic landscape	11	2016
Calypto and cultural commodification in Aruba	11,12	2017
Assessment of endemic fauna in key biodiversity areas	15	2017
Emotional impact in people with disabilities striving to be independent in Aruba	3,10	2017
Policy for energy system innovation: multi-actor policy-making of the Aruba energy transition	11,13,17	2018
The impact of illegal dumpsites on the environment	15	2018
Sharing stories <i>baopalo</i> : the making of heritage in a Caribbean oil town	9,10,11	2019
Off-road driving and the ecosystem: impacts on landscape functionality	15	2019
Import costs of fruits and vegetables on Aruba: mitigating the volatility of prices to ensure sustainable supply	2	2019

Program project spin offs

- Impact in Aruban context: inspiration for community initiatives, local activism and policy proposals
- Academic publications of research outcomes
- Alumni engagement in Aruban education programs

In participants' own words

Getting a chance to go public with what I've researched was a new and unique experience for me.

[Working with] students of other disciplines ... made me think ... [beyond] what I've learned in my study.

The program granted me the possibility of meeting key people, improving my thesis results so these could really make a difference and benefit Aruba.

A simple bachelor's thesis turned from an annoying requirement into an opportunity to make a difference :)

A life changing experience ... it helped to form us considerably at a professional and academic level, but it also opened a window into the future to give us a glimpse and first-hand experience of what we believe are our passions.

Key Outcomes: Numbers

Outcomes 2014-2019 in numbers

UU students completing preparation course	47
UU students completing field research program	26
UA students completing field research program	31
Field research projects in annual volume	56

All projects include community-based dimensions & address needs in Aruban society.

Projects link to one, and often more, global SDGs.

Total projects per SDG (2015-2019)

1 NO POVERTY 1	2 ZERO HUNGER 1	3 GOOD HEALTH AND WELL-BEING 6	4 QUALITY EDUCATION 4	5 GENDER EQUALITY 1	6 CLEAN WATER AND SANITATION 2
7 AFFORDABLE AND CLEAN ENERGY 1	8 DECENT WORK AND ECONOMIC GROWTH 10	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 3	10 REDUCED INEQUALITIES 6	11 SUSTAINABLE CITIES AND COMMUNITIES 8	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 4
13 CLIMATE ACTION 9	14 LIFE BELOW WATER 5	15 LIFE ON LAND 7	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 5	17 PARTNERSHIPS FOR THE GOALS 9	THE GLOBAL GOALS For Sustainable Development

These totals include projects involving cultural heritage, linking them to SDG5, 8, 11, 16 and 17. depending on the focus.

Conclusions

- Undergraduate research in context of diversity: a pedagogical instrument that creates a transformative and empowering experience for students.
- Students benefit personally from cultural and intellectual exchange.
- CBR & peer-to-peer learning: understanding and appreciation of different kinds of knowledge.
- Research skills made meaningful for students and society by invoking SDGs.
- Bachelor students make transition from student to independent researcher (quality research)
- Outcomes of undergraduate research have impact in the context of the small island state.

Acknowledgements

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For detailed information, see

UA website: <http://www.ua.aw/international/>

UU website: <https://tinyurl.com/qvc8naw>