



Inclusive higher education learning outcomes for rural and township youth: Developing a multi-dimensional capabilities-based higher education index.

CONCEPTUAL APPROACH, RESEARCH QUESTIONS AND RESEARCH DESIGN

Conceptual approach, research questions and research design

1. Conceptual Approach

The conceptual framework for this project is the capability approach (CA) to well-being and agency, developed by Sen and Nussbaum, and embedded within human development as a normative framework. A focus on capabilities means evaluating learning outcomes to include, but going beyond, human capital production and economic development. The CA refers to the set (wide or narrow) of opportunities (or capabilities) from which an individual can decide on and realize valuable states of being and practices ('functionings') in comparison with others. It emphasises agency; an agent being someone who acts and brings about change, and whose achievements can be judged in terms of her own values and objectives. For individuals the CA implies removing obstacles in their lives so that they have more freedom to live the kind of life, which, on reflection, they find valuable. Social, political, policy and economic arrangements interacting with personal biographies are understood as 'conversion' factors for enabling or constraining capabilities, which are then the metric for assessing advantage, well-being and a flourishing life. In this project we understand learning outcomes as the capabilities valued by students, but also other stakeholders, in terms of student development, well-being and agency within and beyond university, and as a means of foregrounding the role that graduates should play in building democratic and decent societies. From an integrated equity-quality perspective, the CA allows us to think differently about good quality education and learning outcomes. In particular, we do not only look at instrumental outcomes such as student performance on standardised measures, but also consider student well-being and agency. Learning outcomes are thus capability expansion for diverse students and

graduates. In addition, human diversity is central to the CA, in particular in understanding how personal, social and environmental contexts influence learning outcome achievements as capabilities. The CA thus helps us understand and analyse mechanisms of inequality that operate within and beyond the higher education context to influence in/equality of learning outcomes. It

provides a conceptual approach that explicitly takes account of quality and equality concerns mapped over diversity to improve learning outcomes in the normative direction of human development.

There has not yet been a South African study encompassing a systematic, integrated and longitudinal mixed methods investigation of the multi-dimensional dynamics or factors shaping and/or inhibiting disadvantaged students' capabilities: i) to access, ii) participate and succeed in higher education, and iii) move from higher education to work. We do not know in fine-grained detail from students how they understand and experience disadvantage, equity and quality in relation to capability-based learning outcomes, nor how higher education fosters agency and decision-making that empowers young people to work to change their own lives and that of others. A capabilities-friendly approach would aim to understand and work towards changing the complex conditions which inhibit valuable education capabilities specifically for rural and township students and work to realize the transformative potential of higher education. It will include youth in the research process as a 'right' and a form of socially innovative policy-making, equipping students to make independent and critical inquiries about their own lives and context, and to advance their capability for 'voice'. The CA is highly sensitive to gender, race and other forms of diversity through the focus on each and every person being able to choose many different functionings, and on the conversion factors which shape inequalities of capabilities. This constitutes a wide informational basis for social justice evaluations and policy priorities (Sen 2009).

2. Questions

1. How do disadvantaged youth from rural and townships schools access, participate in and succeed in higher education, and then move into work?
2. What contextual dimensions of economic, policy, social and educational conditions enable or inhibit access, participation and success?
3. What multi-dimensional higher education learning outcomes which benefit individuals and society are valued by stakeholders, including students?
4. How can the capabilities approach be applied analytically to the multiple data sets to produce a multi-dimensional inclusive higher education capabilities-based higher education Index?
5. How can the Index be used to inform policy and practice interventions that confront the structural inequalities impacting on learning outcomes of students from challenging contexts?

3. Research design

A multi-method, longitudinal study is proposed to investigate the complex nature of how higher education opportunities and achievements are distributed among students from challenging rural and township contexts. The project will work with the youth-led, non-profit Thusanani Foundation (www.thusananifoundation.org/). Thusanani is a Tshivenda word meaning ‘Empower Each Other’. It aims for an integrated approach to higher education based on access to accurate information, technology, advice and encouragement for admissions and subsequent mentoring. The Foundation does not overlook the importance of economic resources but seeks to improve the terms on which rural and township students gain access to these resources, so aligning well with the CA. Since 2011, it has evolved from a two student initiative into a registered organization with over 1500 volunteer mentors in five institutions

of higher learning, reaching over 35 000 high school students in rural KwaZulu-Natal, Limpopo, Eastern Cape, Free State and some Gauteng Townships. By 2015, the Foundation had enrolled over 450 students into universities. The research participants are thus young people who have gained access to higher education through the support of the Foundation. These young people will be in their second year of study in 2016; they are distributed across four diverse university sites and studying engineering, science, commerce and humanities subjects at diploma or degree level. In addition, ethnographic observations will be completed of Thusanani workshops in schools, targeting high school pupils in grades 10 and 11 in one rural district of Limpopo involving student from 20 schools (in 2017 and 2018) who hope to access university. The Foundation has been selected at the site through which to work to enable bottom-up access via a youth-led Foundation and its students, rather than top-down through university structures.

Complex data sets are required because the distribution of capabilities is embedded in families, schools, university educational and social arrangements, and work-readiness activities. Insights into these processes will be gained by exploring student pathways, experiences, aspirations and plans for their future careers. We will also explore their values and commitments to contributing to an inclusive society, and what forms and sustains these values. In addition, students will be involved in participatory workshops and research processes so that the project directly expands their capabilities and operationalizes their right to research. To demonstrate the feasibility of the project, the time allocation and sequencing of different methods and key outcomes from each are summarised in the data summary table (attached), with further project planning detail in the project plan and milestones (attached). The combined data sets, consisting of both quantitative and qualitative data, will enable both a macro view of the educational pathways of the selected student population, but also fine-grained micro accounts of their lives. The causal mechanisms and processes through which observed impacts on student learning outcomes are generated will be analysed and explained using a series of data sets, as explained below.

3.1. METHODS OF DATA COLLECTION

3.1.1. Existing large data sets

1) To generate a national and longitudinal view of inequalities and learning outcomes measured by student success and completion rates, we will use South African Higher Education Management and Information System (HEMIS) (attached letter of permission) audited national level data to track two cohorts (2006-2013 and 2007-2013) of (individual) students from rural and township schools) over 8 years (by which 94% should have graduated or will have dropped out based on previous national cohort studies). This data will also be disaggregated by gender, field of study and university and correlated against patterns of success (and see De Villiers and Van Wyk, 2013).

2) The Statistics South Africa (Stats SA) annual General Household Survey, and Quarterly Labour Force Survey (all in the public domain) data over the same period will be analysed to track composite education, living conditions, and employment trends of young people nationally. In addition, the analysis will incorporate a particular focus on the selected rural district in the Limpopo province in which the Foundation workshops (to be observed during fieldwork –

see C5 below) targeting grade 10 and grade 11 learners take place. This analysis will provide additional descriptive and contextual information against which the primary data being generated through this study can be interpreted.

3.1.2. New statistical data: student survey

1) Quantitative survey of all students supported by the Thusanani Foundation up to April 2019 at universities in South Africa (approx.n=700 students) to establish their valued learning outcomes, what has contributed to their learning outcomes and what have been the obstacles. The survey will also explore their aspirations for work, life and contributions to society. In addition, a final years students in the four universities and in the same faculties will be surveyed (approx.n=1600). The survey will collect characteristics of students (gender, ethnicity, race, religion, social class, home

neighbourhood/spatial characteristics, age, disability) and measure impacts using capability-based indicators (for example, knowledge and skills, access, participation, voice), including which impacts respondents thought were most important. The development of the survey instrument will be based on emerging findings from the qualitative data (see below), and will be piloted with a small sample prior to full implementation.

2) Thusanani Foundation already maintains data to track students from school through university. These data sets will enable a wider view a multiplicity of conversion factors and how they interact and combine to enhance or restrict capabilities and functionings.

3.1.3. Qualitative data

This data set will allow for a micro lens on well-being, intersecting conversion factors and experiences over time, and the complex interactions of agency and structure.

1) Fine-grained annual life history data of 48 (4 universities x 12 students) Thusanani students from their 2nd year at University through to first year post university (4 x 48 = 192 interviews). This will capture student voices, experiences of causal pathways, as well as the learning outcomes these students have reason to value. A longitudinal life history approach is currently being piloted by one of the COIs (Wilson-Strydom) and now in its second year at UFS.

2) Participatory research (PR) will be undertaken with a subset of the 12 life history participants at each university (6 students, plus 2 student mentors at each university, 8 in each PR group). The PR will focus on student conceptualisation of intersectional disadvantages in relation to learning outcomes, and exploring student higher

education pathways, experiences and outcomes. Once each university group has finished their participatory study, then a participatory workshop will be convened for all the students and mentors, drawing on the results of each of the studies to make national policy recommendations to complement the other data coming out of the study. The PR will employ visual methods, photo-voice and similar, to collect data from other students from rural and township areas but not supported by the Foundation (we anticipate approximately 40 additional students participating in the PR – 10 per university, but this will be decided finally by the student researchers). This strand of the research aims to give genuine voice to young people in the research and policy-making process.

- 3) Interviews with a sample of 6 Thusasani Foundation student mentors/volunteers from each of the 4 university sites (n=24).
- 4) Interviews with the 5 members making up the Board of the Thusanani Foundation to explore Thusanani strategies, experiences and recommendations regarding learning outcomes.
- 5) Ethnographic 'snapshots' of Foundation workshops over one week with grade 10 and then with grade 11 school pupils the following year, in one rural district. This will involve members of the research team spending the week with the Foundation staff and observing the work being done. In addition to open-ended field notes, the researchers will also complete common observation questionnaires so that the observational data can be verified. They will also ask the participating grade 10 and 11 students to complete a very short anonymous questionnaire on their workshop experiences.
- 6) Fieldnotes at stakeholders meetings to capture perspectives of policy makers and other stakeholders more cost and time efficiently than further rounds of interviews.

3.1.4. Measurement Methods

A thorough review will be done of capabilities-based measurement projects to examine how an index has been created, with which dimensions, whether normative or statistical or both, indicators and weighting. In particular we have in mind the Alkire-Foster (www.ophi.org.uk/research/multidimensional-poverty/alkire-foster-method) multi-dimensional poverty index which allows for decomposition by population group, breakdown by dimension or indicator, and changes We will examine the Bhutan Gross National Happiness Index (9 domains and 33 indicators) (www.grossnationalhappiness.com/). The OECD (2013) Framework for Measuring Well-Being and Progress will also be monitored. None of these are specifically an education index, but we also build on our previous work towards developing higher education capabilities-based

indexes (Walker, 2006; Walker and McLean, 2013; Wilson-Strydom, 2015). We will also monitor and engage with other initiatives such as the 2014 roundtable on post-2015 equity and learning indicators organised by DfID, Overseas Development Institute and The

Education and Development Forum. We expect the Index to have up to 10 core capabilities that are components of student learning outcomes, and within each domain, two to four indicators, all informed by the evidential base of the project. We envisage that the Index can be an instrument of public debate and of policy, and can capture interconnected information that otherwise cannot be presented so succinctly. We are also aware of the problem of simplifying complex issues as targets and indicators (see fxb.harvard.edu/power-numbers-un/; Langford and Winkler, 2014; Unterhalter, 2014), and will keep these challenges in mind, throughout, as well as document our approaches to overcome them.

3.1.5. Documents and Literatures

Textual data will complement the data sets above. It will include national development and education policies, ‘the state of nation’ as the research progresses, media reports, university mission and vision statements, and relevant websites. After an initial comprehensive literatures review and the production of a Zotero bibliographic data base, the literatures review will be updated from relevant higher education, development, and capabilities research over the four years of the project.

3.2. DATA ANALYSIS PROCESS

Survey data, ethnographic field notes, interview transcriptions, and participatory research materials will be analysed both as discrete entities and also combined as a whole data set using key analytical concepts including, capabilities, valuable functionings, empowerment, agency, conversion factors (structural and personal) and instrumental freedoms to illuminate the empirical data. In addition, we will draw upon the idea of distinction between the internal language of description (conceptual model) and the external language of description (empirical description) (Bernstein, 2000) to allow these concepts to be treated as open and subject to change, requiring constant modification in the light of empirical findings. Initially although there will be an outline of capabilities in mind, identification of themes and codes will be informed by adopting an inductive approach to prevent over-imposing the theoretical framework onto the findings (Thomas, 2003). Any aspects of the data which are not well explained through the use of a capabilities analytic

framework will be identified, and alternative frameworks explored. Transcriptions will be read by team members individually and discussed reflexively for emerging themes and issues in relation to the research questions (Speer, 2002). Analytic validity will be sought by analysing and reflecting on any differences in responses which appear to arise from the methodology; the ways in which interpretations might be influenced by our own professional identities; and, by consulting with our academic advisory group and our participatory student research groups. The data will be analysed using a mixture of computer-assisted (SPSS and NVivo) and human techniques in order to combine the thoroughness of computer-assisted analysis with the complex skills of human approaches. NVivo will also discourage ignoring data that does not fit the capabilities analysis so allowing for thorough inductive analysis (Welsh, 2002). Analysis will produce fine-grained narratives, statistical accounts and generate a capabilities metric to measure learning outcomes. Such a metric, as an alternative to traditional measures of learning outcomes, will be a critical contribution for policy work as well as academically. Once developed, the capabilities metric will be tested against the interventions and what we know from the research about the outcomes of the Thusanani Foundation work.

3.3. OUTPUTS

The project combines innovative research and critical thought with policy relevance and attention to policy problems. Outputs comprise: a) academic meetings and publications; b) policy-related reports, briefings and events, although we expect some cross-over. There will be a combined final conference for academic and policy research users. Both groups will benefit from the HEMIS cohort analysis. **Academic**: Zotero bibliographic data base for scholars and graduate students; archive of media reports; 10 conference papers (South Africa and international); 6 articles for peer-reviewed journals; 2 (international) webinars; 4 working papers; 1 monograph proposal; 1 podcast for UK SRHE website. **User-focused**: 6 briefing papers for policy makers and development organisations; 3/4 briefings and summaries for university practitioners; academic/policy HSRC webinar; two short films and 10 YouTube video clips; 1 Insight briefing for the BERA website, 3 contributions to *The Conversation*, both UK and Africa (see pathways to impact); high level policy roundtable; student guidebook on applying to, coping in higher education, and building a CV for work opportunities.