

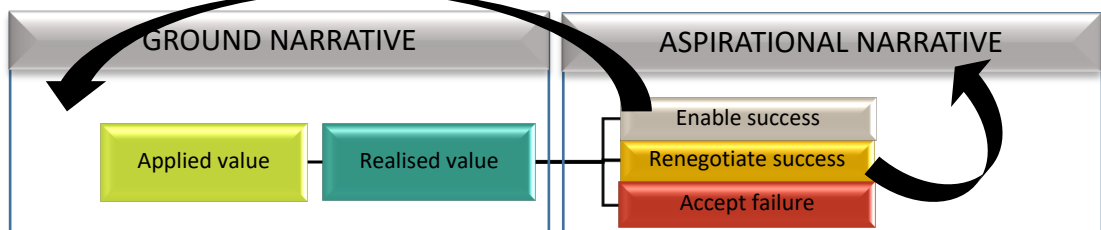
# STRENGTHENING ASSESSMENT OF CO-CURRICULAR RESEARCH THROUGH THE USE OF A VALUE CREATION FRAMEWORK (VCF).

Jacques Pienaar's study explored a research project amongst a group of Grade 10 Life Sciences students. They were preparing a report of their research on local water matters for presentation at an international youth conference: "Water Is Life 2016". The students attend a well-resourced independent school which follows the IEB (independent exam board) curriculum, which in turn is based on the National Curriculum Assessment Statement (CAPS). Jacques' interest was to identify shared aspirations amongst stakeholders such as the department of education, IEB, school, students and conference organisers. Shared aspirational narratives among stakeholders are, for students to be: **Environmentalists**, **Researchers** as well as locally and globally situated, holistic **Citizens**. The VCF was then applied to assess the value achieved, using each aspirational narrative as focus.

The notion of 'value creation' was inspired by Wenger, Traynor & de Laat's (2011) conceptual value creation framework (VCF) for assessing value achieved within a community. The VCF is further supported by a "measures of value creation" tool, designed by Wenger et al. which identifies potential sources of evidence and typical indicators for determining whether what has been valued (aspirational narrative) has been achieved (ground narrative).

Wenger argues that what is valued by each stakeholder is in constant flux. He calls this an 'aspirational narrative'. Actual attempts (applied value) to meet the expectations of the aspirational narrative and the impact on performance (realised value), are considered the "ground narrative". When the ground narrative and the aspirational narrative are misaligned, three possibilities are brought to the fore, which itself could represent value achieved:

1. Accept failure of activities, maintaining current aspirational narrative (little to no value ),
2. Renegotiate the aspirational narrative (transformational value) or
3. Reflect on what would be required to enable participants in a process to meet such aspirations (enabling value and strategic value).



Throughout the student led co-curricular research process Jacques collected data in the form of semi-constructed interviews, weekly questionnaires and reflective writing pieces. He also analysed the IEB curriculum guidelines, the school's policy and guiding documents, the conference research guidelines and his own notes regarding the communication of his expectations. Finally, he analysed the students' report and presentation, which was produced for the conference.

Jacques used Wenger et al's VCF framework and indicators as tools to analyse his data, and to draw supported conclusions about the value achieved in each shared narrative.

An illustration of the analytic frame in use can be seen below. The extract is populated with evidence identified using the “measures of value creation tool” and focusing on one of the shared aspirational narratives – for students to be **RESEARCHERS** .

Cycle 1: Immediate value (activities and interactions)
“I found it interesting that we would be given sort of, this kind of responsibility (to determine our own research topic and process)”
Cycle 2: Potential value (Knowledge capital)
“how to sift through resources”, “I did not know that OneNote existed nor about its effective uses.”
Cycle 3: Applied value (Changes in practice)
“I do use these (research) skills in subjects such as Biology and English” “use(d) One Note as a collaboration tool”
Cycle 4: Realised value (Performance shift)
“I improved my skim reading skills and am now better able to read-over info and critically decide if it is of any use”, “The skills I have learnt have definitely helped me to improve my work efficiency (and in meeting deadline’s”
Cycle 5: Reframing value (Redefining success) (Includes Transformation, Enabling and strategic values)
“Focus on one aspect (within water issues) and maybe do an experiment. (rather than research only)”, “I wouldn’t place most of the workload in the holidays (plan work distribution)”

In a second stage of analysis, Value Creation Stories (VCS) were used to track the value achieved by the individual to gain a more detailed understanding of the process and how it unlocked value for that individual.

The research revealed that realised value was indeed achieved in all three of these research narratives. That is, learners achieving towards becoming: Environmentalists, Researchers as well as Locally and Globally Situated, Holistic Citizens. In addition, reframed value was achieved since there were key indicators present in the learner’s reflective writing, indicating the renegotiation of success (transformative value) or the process that enables (enabling or strategic value) success.

Various curricula (IEB SAGs and national CAPS) recognise the need to develop research proficiency at secondary level, however this paper argues for, and recommends that reflective writing be an explicit part of such a process, both as an opportunity for learners to develop strategic, enabling and transformative thinking and for the teacher to demonstrate and possibly assess the value which has been achieved.

## REFERENCE

Wenger, E., Trayner, B., & de Laat, M. (2011). Promoting and assessing value creation in communities and networks: A conceptual framework. Rapport 18. Netherlands: Open Universiteit