

**AN OVERVIEW OF SIGNATURE LEARNING WITH SPECIAL
REFERENCE TO ITS FUTURE ADOPTION AT STELLENBOSCH
UNIVERSITY**

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1. BACKGROUND

Purpose of report

This document responds to a brief to make recommendations regarding the nature of a Signature Learning Experience (hereafter abbreviated to “SLE”) to be incorporated within the broad programme of Stellenbosch University (SU), with the additional requirement that this Signature Learning Experience also address the goals of the Hope Project.

Sources of information

Seven sources have been used in preparing this report:

1. Academic literature on the topic.
2. The practice at other universities. Eighteen American universities, two Canadian, two Australian, one New Zealand and seven South African are referred to here. (For a table summarising the SLE-type programmes at South African universities, see Appendix A.)
3. Planning and evaluation reports on SLEs.
4. Interviews with staff and students of Stellenbosch University, Stellenbosch and Tygerberg campuses. Besides orienting and report-back meetings with the Director of the Centre for Teaching and Learning, the writer interviewed twenty-five members of staff and eight students and administered a brief survey to another thirteen students. (See Appendix B for a list of staff consulted.)
5. Discussion during consultation sessions with staff. (See Appendices C and D for session reports.)
6. Personal communication with academics at other universities (See Appendix B for list of people consulted).
7. As always, the interviewer/researcher is part of the process.

2. INTRODUCTION

Clarity of purpose

Before beginning a new endeavour it is essential to consider what one hopes to achieve by the enterprise. Clearly, the development of a Signature Learning Experience cannot be undertaken simply because it is a newly emerging topic in educational circles. It would also add little value if it duplicated existing programmes or functioned as an isolated add-on, unrelated to other academic work. Thus, before the SLE is developed there must be an explicit common understanding of its purpose. To some extent SU has defined what it hopes to achieve by means of the SLE: it should increase students' ability to work with diversityⁱ and support community engagement initiatives, in line with the goals of the Hope Project.ⁱⁱ However, as will become clear in the following discussion, decisions regarding the nature, content and structure of a SLE at SU cannot be made until its overall purpose is more closely defined. Is the aim primarily to help students from diverse backgrounds live and work together with sensitivity, understanding and respect? Is it to produce graduates who are reflective citizens? Critical thinkers? The answer to this question will shape the Experience, and without a clear answer the university risks adding a programme without adding fundamentally to the value of its offerings. Certainly a Signature Learning Experience ought not to be just another programme. Rather, it is a broad-ranging change of approach intended to act as a shaping force in the lives of both those who teach and those who learn (Terwel & Walker, 2004), a culture that permeates all teaching and learning. Thus, a SLE ought to function as part of the culture and fundamental ethos of an institution. It cannot be an isolated, stand-alone add-on, but rather, part of a whole educational process, which may require a radical change of focus. As Youatt and Wilcox (2008) opine, with reference to preparing students to face the challenges of the future, “A single, isolated and short-lived program in one part of a university is clearly not the answer. An integrated, embedded, and long-term culture change within higher education is clearly required” (p.26). Then a university can produce “graduates who portray unique attributes, in line with the...identity of the institution (Hay & Marais, in press). Furthermore, because signature pedagogies vary across disciplines, a certain amount of flexibility is desirable, rather than offering an across-the-board strictly uniform programme. A common learning experience does not necessarily imply that student have done exactly the same things, but rather that they have been part of the same larger process and have emerged with the attributes the university sought to impart.

Philosophy of signature learning

Discussions about signature learning are at root responses to the question of what it means to be an educated person. Deriving from this is the question of the purpose of a student's taking a

particular course. Are students simply collecting credit-bearing experiences, or are they “acquiring a coherent set of knowledge, skills and dispositions that help (them) make sense of, and participate meaningfully in, the human experience?” (Ciccone, 2009, p. xii). Rooting one’s decisions in this way, one then begins to ask what knowledge, skills and dispositions will make a difference in the lives of one’s students, and construct one’s curriculum and pedagogy accordingly. Signature learning requires the design of a learning environment conducive to deep understanding (Wattiaux, 2009) rather than the mere acquisition of factsⁱⁱⁱ.

Prevailing definitions

The term, “signature pedagogy,” was coined by Lee Shulman as recently as 2005. Signature learning is thus a newly emerging topic in academic literature and as such has yet to acquire a uniform definition. There are at least five general ways of regarding a Signature Experience:

- A. The broad, all-encompassing experience of being at a particular university. Thus, the signature is that of the university and its general ethos -- what marks a graduate as having come from a particular institution.
- B. The signature of a particular discipline: thus, for example, that a graduate from a medical school should think and act like a doctor, not simply be someone who has acquired certain knowledge and skills.
- C. A short activity of some kind in which students are united. This might be an academic exercise or a service project, for example.
- D. Some universities seem to regard Signature Learning as being largely synonymous with work-integrated learning or service learning.
- E. Other universities use the SLE to develop academic skills and remove barriers to student success.

Other variants are, of course, possible. SU will have to decide where to place itself in terms of defining SLE, and this will derive from what it sees as the fundamental purpose of the SLE. It should be noted, however, that in most writing on the topic, signature learning is not regarded as a single, once-off activity, but rather as *an integration of particular pedagogies with broad learning goals and a combination of in-class and co-curricular activities over a longer period*. Virginia Tech’s definition of Signature Learning is a useful one to bear in mind: “a unique learning environment that integrates a broad base of disciplines to enhance creative teaching and comprehension.”

3. THE PRACTICE OF SIGNATURE TEACHING AND LEARNING

Aims

Literature on SLEs refers to a broad range of desired outcomes. Below is a summary of aims that appear.

Service to the wider community

- Emphasis on citizenship, civic knowledge and engagement,
- Teaching students for the public good,
- But not yielding to a consumerist rationale.

Development of graduate attributes (academic)

- Remove barriers to student success
- Provide foundation and skills for lifelong learning
- Avoid producing “highly skilled barbarians” (Mueller, 1980)
- Develop
 - a well-rounded student, with an emphasis on critical thinking^{iv}
 - strong oral and written communication skills
 - quantitative skills
 - verbal comprehension
 - critical thinking
 - scientific reasoning
 - competent performance
 - reasoning and moral judgment
 - innovation and problem-solving skills
 - the ability to adapt to change
- Encourage independent thinking and creative imagination
- Ensure that we do not turn out “students who know more and understand less” (DiCarlo, 2009)

Development of graduate attributes (personal)

- Knowledge and understanding linked to leadership skills
- Ethical reason and action
- “Thinking habits of mind, heart and hand” (Shulman, 2005). Depth of critical understanding, but more than that – service, integrity – cognitive, practical, moral.

- Changing people from the inside, formation of character and values. Who we are.

University environment

- Community of learners^v – everyone should be a discoverer, a learner
- Learn by enquiry, not simply by transmission
- Integrate broad base of disciplines

Signature pedagogy

Logically, one is unlikely to have signature learning without signature teaching. Thus, any attempt to introduce a meaningful signature learning experience will of necessity require that lecturers scrutinise “the fundamental ways in which future professionals are educated for their new professions” (Shulman, 2005, p.52). Signature pedagogy is not simply one fixed approach to preparing students. It requires that “teaching methods, philosophical perspectives, and contextual issues...be addressed in continuous processes of pedagogical, curricular, and institutional evolution” (Wayne, Bogo & Raskin, 2010, p. 330).

Articles on signature pedagogy emphasize enquiry-based thinking and the expectation that students be both active and interactive (Wayne, Bogo & Raskin, 2010). Calder (2006) points out that factual knowledge “is not accumulated like furniture, but rather develops in the context of questions and problems” (p.24) and Graff (2003) bemoans that fact that academics fail to teach students to recognize and engage in debate, conflict, dialogue and conversation.

These are not new ideas. Indeed, writing on signature pedagogy, a seemingly contemporary concept, echoes ideas from the late nineteenth century, such as Wolfe’s 1895 (cited in Peden & Wilson VanVooris, 2009) calling for informal conferences and quizzes and his recommendation that “the instructor should be suppressed and the director and inspirer brought into his place” (p.387). The fact that the same pedagogical principles are still being argued more than a century later, besides being an example of what Shulman (2005) calls “pedagogical inertia,” also suggests that many lecturers continue to regard themselves merely as subject experts, and neglect their role as teachers. There is, however, a considerable body of research demonstrating that active learning strategies, inductive teaching and constructionist learning result in deeper understanding of material, greater interest in the subject, increased academic confidence and greater retention of under-represented groups. (See Cortright, Collins & DiCarlo, 2005; Giuliadori, Lujan & DiCarlo, 2006; DiCarlo, 2009; and the studies referred to in Bauer-Dantoine, 2009.) Thus, *a programme for Signature Learning will have to include staff development*, mostly because of the teaching methods required, but also because SLEs usually draw on more than one discipline, and “even faculty who bring disciplinary expertise to the course are ill-prepared for a complex interdisciplinary exchange without concerted preparation, reading and dialogue” (Nussbaum, 1997, p.75).

Components of a SLE

The term “Signature Learning Experience” is relatively new, but the experience it describes is less so. Indeed, some universities that do not use the term at all have many of the same practices as do those that use Signature Learning as part of their marketing strategy. Thus, one must look beyond the term itself to approaches, programmes and procedures that contribute to creating a student experience intended to be unique.

One theme that appears, though not necessarily under the label of SLE, is multi- or transdisciplinarity. A programme could be built around a central concept, such as sustainability, social transformation, leadership or citizenship, with an emphasis on “finding real-world solutions to environmental, economic and social challenges” (Arizona State University), drawing on a number of disciplines to address those challenges. The themes of the Hope project could be addressed in this way. As students experience a transdisciplinary approach they recognize “different yet overlapping ways of thinking, knowing and doing . . . , they begin to see a conversation among their courses (and become able to) shift from one perspective to another” (Chick, Haynie & Guring, 2009, p. 12).

Several universities offer first-year seminars: small-group, discussion-based courses that are more flexible in delivery and content than the usual first-year classes, and that are frequently built around a particular, usually interdisciplinary, theme.

Some universities offer what could be called a combination course, that is, one that combines classroom learning with co-curricular, community-based work.

Many universities do not refer specifically to a SLE, but do offer signature-learning-type educational enrichment opportunities, such as seminars, an honours programme, study abroad, fieldwork, service learning and capstone courses. Thus, the signature of the university may be imprinted through a number of diverse experiences all designed to accomplish the central aim of the university.

Virtually all universities offer some kind of First Year Experience covering orientation to the university and university life as well as skills for academic success and personal development. These courses may be voluntary or required, and range from a few weeks to a full year. Depending on the scope, some of these may be considered to be SLEs.

Examples of good practice^{vi}

The institutions mentioned below by no means constitute a comprehensive list of good SLE practice, but do provide examples of valid ways in which a SLE could be approached. They are grouped according to how they address signature learning.

Centres

Augsburg College has a Centre for Citizenship and Learning offering Signature Programmes, mostly community-service based.

Wesleyan University has a Centre for Social Entrepreneurship whose aim is to utilise entrepreneurship for social causes and nonprofit ventures. The Centre organises workshops, speakers and networking events. Grants are available to undergraduates for specific projects.

Philadelphia University is in the process of creating a Centre for Signature Learning, which is intended to serve as a nexus for faculty development, pedagogical experimentation and research in active integrative learning. The type of education envisioned will include experiential learning (such as labs, research, study abroad, field work, internships and co-curricular activities), global curriculum content, the use of technology and the infusion of the liberal arts. The website (<http://philau.edu>) provides an informative view of how an institution is going about starting an SLE.

Michigan State University has three Centres for Integrative Studies that offer core-curricular general education programmes in Science, Social Science and Arts and Humanities. These core curricula include research, service learning and cross-disciplinary interaction, with an emphasis on citizenship. The Centre for Integrative Studies in Arts and Humanities requires that students volunteer or work as interns in a community engagement project. Usefully, it has a website for staff giving examples of experiential education.

Combination courses

One of the *University of Sydney's* major organisational values is what they term “Engaged Enquiry.” This is expressed in two combination-type approaches available in a number of programmes, designated as Research-Enriched Learning and Teaching (RELT) and Community-Engaged Learning and Teaching (CELT). RELT incorporates new knowledge in the curriculum and requires that students think in research-like ways, based on active questioning. In CELT, community-based sources of knowledge and application are included in the curriculum. CELT partners with business, industry, government, education, NGOs and community organisations. Because of the requirement that “teaching and research centres should in large part address and be informed by questions and issues of importance in local, regional and global contexts,” ongoing curriculum renewal is necessary. While experiential interaction with information and expertise from sources outside of academia is a focus of the curriculum, off-campus experiential learning is only included where this is relevant.

Broad approach

In an internet search for the term “Signature Learning Experience” the institution that appears most frequently is *Centennial College*. Their SLE has four components: a required course

in global citizenship, a student portfolio requirement in which students are to document their learning as global citizens throughout their programme of study, staff development and the embedding of diversity and equity in learning and teaching experiences. The SLE is consciously conceived as making requirements of both staff and students. The website (<http://www.centennial.ca>) tells how they went about implementing this approach.

Duke University has a two-year approach that fits the general profile of signature learning. It has four components, none of which is compulsory:

1. The Focus Program for first-years. About 20-25% of first-years are admitted to Focus. The programme consists of small-group weekly seminars, field trips, community service and research.
2. First-year Seminars. These are small, discussion-based courses, some interdisciplinary, some not. Topics relate to the lecturer's research interest.
3. In their second year students can register for “research-service learning.”
4. In their second year students can apply for a “Stay in Focus” grant, which provides seed money to engage in research, design or creative arts projects.

Duke also hosts an annual Undergraduate Research Symposium.

Brigham Young University does not use the term SLE, but the BYU signature is stamped on all its activities. BYU aims to be spiritually strengthening, intellectually enlarging, character building and preparatory to lifelong learning and service. This is infused and expressed in a multitude of ways, including a first-year reading programme, freshman seminars, seminars for academic majors, student development seminars, a first-year arts card that gives discounted entrance to arts events, mentoring for all students, fortnightly devotionals, fortnightly fora where students are addressed by a leading academic or public figure, capstone courses, field studies which allow for undergraduate students to conduct self-designed research abroad and the widespread and strongly encouraged practice of using undergraduates as research assistants.

Degree programmes

The *University of Otago* has an interdisciplinary Ecology curriculum (Spronken-Smith et al., 2011) that addresses the research, problem-solving, creativity and independent learning aspects of signature learning. Inquiry-based learning (IBL) is the approach used throughout the three-year degree, starting with structured, teacher-led inquiry, progressing to guided inquiry, where the teachers provide the questions and the students are self-directed in finding answers, and finally to open inquiry in the capstone course, where students formulate their own questions and follow a full enquiry process. The type of IBL they do also moves from information-oriented to discovery-oriented .

Babson College, a private business college offers a three-level series called “Science-Technology-Society,” with courses around a central theme and an interdisciplinary approach. Intended to develop critical thinking about science for non-science majors, the first course provides a general understanding of scientific epistemology, the second addresses technological implications and the third deals with ethical and societal issues. All three courses use popular films as a launching point for discussion (Laprise & Winrich, 2010) .

Arizona State University has a School of Sustainability that offers a degree-granting programme with a transdisciplinary focus. The chief pedagogical approach is collaborative learning. All students have to take a second language and to do some work in a discipline outside their school. In addition, they all take a 5-contact-hour course that covers work habits, study skills, time management, careers in sustainability, and so forth. The Capstone Experience consists of an internship, service learning or research.

Besides the usual Colleges of Humanities, Biological Science, Social Science and Physical Science, the *University of Chicago* also has a New Collegiate Division, which offers a full transdisciplinary undergraduate degree with four possible majors namely, “Fundamentals: Issues and Texts,” “Law, Letters and Society,” “Religious Studies” and “Tutorial Studies.”. In their second year student select their major and develop their own programme around questions they ask, for example, “Is the family a natural or a cultural institution?” Chicago also has an interesting blog site which, besides providing a space for students to share their academic experiences, lists essay ideas for the year, provided by students and alumni. For sample essay topics, see Appendix E.

The University of Limpopo offers a degree in Applied Language Studies, half of which is offered in English and the other half in Sepedi. It has a transdisciplinary aspect in that it examines the role of language in a number of contexts, for example, Language and Society.

Courses

The University of Wisconsin - Milwaukee has a number of Freshman Seminar courses where the classes are smaller and the scope broader than regular first-year classes and emphasise discussion and collaborative learning. The seminars, which are elective, offer a range of different themes. See Appendix B for examples.

Scripps College has a core curriculum of Interdisciplinary Humanities consisting of three courses with the overall title, “Histories of the Present.” The third of these is in the format of a small seminar and includes a self-designed, faculty-supervised project.

The University of Fort Hare's Grounding Programme is a course built around small learning communities with the twofold purpose of helping students both to establish sound learning practices and to engage in socially important questions. Students from diverse academic disciplines are placed in small groups, student-led, that meet together to watch film clips and discuss readings. A

lecturer prepares a lecture that responds to student questions that have arisen in their discussions. Students are required to complete written assignments that include a research component, keep a reflective journal and complete some kind of creative project related to what they have learned. The designer of the Grounding Programme saw it specifically as a catalyst for curriculum renewal processes (A. Keet, personal communication, 30 August 2011.)

The University of Johannesburg offers a citizenship programme which is incorporated into all undergraduate qualifications. There are six primary themes: The Political Exercise of Citizenship, Rights and Responsibilities of Citizens, Personal and Professional Citizenship, The Social Exercise of Citizenship and Critical, Knowledgeable Citizenship. Faculties select the most appropriate mode of delivery (fully integrated, stand-alone or seminar series) for their programmes and cover at least three of the six topic areas.

The University of Cape Town offers two extra-curricular, non-credit-bearing courses over the second and third terms of the academic year: “Global Debates, Local Voices” and “Thinking about Volunteering.” These are run by course tutors and a course coordinator and combine online work with attending events, lectures and workshops.

The University of the Free State is currently piloting a Signature Learning Experience. This course is comprised of a series of lectures on a wide range of topics followed by small-group facilitated discussions.

Rhodes University is planning a common course around the university theme, “Where leaders learn.” Modules will be taught by lecturers from various faculties. Students will be required to take a number of modules in various categories during the course of their undergraduate study.

Project

The University of Pretoria's Departments of Engineering, Built Environment and IT require their students to work on an 80-hour Community-based Project, for which the students have to write the proposals themselves. At the end of the project they have to make presentation and write a reflective blog on the experience and what they have learned. Some recent projects have been making mobiles to stimulate the penguins at the National Zoological Gardens and building showers for the elephants and a feeder hoister for giraffes at the Pretoria Zoo.

Honours programmes

Most American universities have an Honours programme. While these programmes are not described as part of an SLE, it may be well to consider those aspects of their approach that could be incorporated into an SLE. Unlike the South African postgraduate Honours year, the American Honours programme is an intellectually challenging undergraduate programme that has smaller classes, seminar-type instruction and research options and that typically allows students more flexibility in the emphasis they pursue within a given programme. These are thus similar to some of

the signature courses outlined above. Some examples:

- In Philadelphia University's Honours programme, entitled “Contemporary Perspectives,” students explore major economic, political and cultural trends in the post-1945 world. The programme includes a research project that “addresses an issue in the professions in light of current international trends.”
- Augsburg College's Honours programme requires out-of-class learning that can be student-created.
- Brigham Young University's Honours programme is open to all students. Also, even students not in the honours programme may enroll for Honours versions of their normal required courses. Besides offering more demanding versions of the standard courses, the Honours programme also includes a Great Works list covering Literature, Art, Music, Theatre, Film and Science and Technology. Students are required to engage with and respond to two works in each category in the course of their undergraduate programme.

Evaluation of signature learning

While there are numerous courses and initiatives that could be described as signature learning, and a developing body of literature on the topic, evaluations of these programmes are few. Institutional progress reports may document how academic interventions such as Supplemental Instruction have improved pass rates, but fail to address the question of whether their transdisciplinary or seminar-type programmes have resulted in the changes in graduate attributes one assumes these programmes were intended to produce. In 1991 Hansen pointed out that there was little systematic information on the effectiveness of graduate learning, and the same seems to be true of Signature Learning. Articles comparing various pedagogies are not uncommon, but it is beyond the scope of this report to address these in any detail. Thus, an attempt to evaluate the efficacy of signature learning experiences must mostly be done indirectly: by looking at evaluations of SLE-type programmes at secondary or postgraduate level or by noting how current SLE programmes have been reflected in or responded to commission reports. This has been supplemented by personal communication on lessons learned in implementing SLE-type programmes and by reference to institutional reports.

High schools

In 1992 Copa and Pearce published the results of two years spent gathering information regarding factors deemed necessary for the 21st-century high school. These included having learning applied to life situations, providing multiple ways to learn, diverse learning settings (including partnerships with business and community organizations, cooperative experiential learning and small learning communities). In 2000 Copa reported on the impact of this approach in

two newly designed comprehensive high schools, in which students were accommodated in interdisciplinary houses of about 100 students each, with three to five teachers assigned to each of these learning communities. The pedagogical approach was founded on real-life problems and project-based learning. Although the average GPA for entering students was the same as for surrounding schools, the two schools in the study had no drop-outs, higher ACT scores than the district, state and national averages and had a higher percentage of students proceeding to postsecondary education than the district average.

Besides reporting on the success of this structure and approach, Copa also highlighted two implementation issues. First he mentioned the importance of staff development and networking, and referred to Tyack and Cuban's (1995) comment that "change where it counts most – in the daily interactions of teachers and students – is the hardest to achieve and the most important" (p.67). His second observation regarded implementing educational change, in relation to which he again referred to Tyack and Cuban, as follows: "instead of being ready-made plans, reform policies should be stated as principles, general aims, to be modified in the light of experience, and embodied in practices that vary by school and even by classroom" (p.68).

Graduate education

Kreuger (1991), in the report of the Commission on Graduate Education in Economics, comments that "we do a better job of teaching...theory and tools than we do teaching their use" (p.1040) and emphasizes the need for relevance, application, creativity and writing and communication skills, all of which the SLE programmes here reviewed seek to address.

Hansen (1991), in writing about the same commission report, highlights many points that are also applicable at an undergraduate level. The Commission had found that lecturers advised more emphasis on links between theory and real-world application and a greater emphasis on writing, doing research, creativity and critical judgment. Students felt they needed more emphasis on real-world problems, interdisciplinary knowledge and creativity and more contact with lecturers. Employers said that the graduates who came to them should have had more training in writing and speaking.

First-year programmes

Knight, Hakel and Gromko (2006), in reporting on Bowling Green State University's (BGSU) University Success course, designed for students with lower than average academic preparation), discuss the value of portfolios. Students assemble portfolios containing samples of their classroom and co-curricular work and are required to document and reflect on their learning. After controlling for background factors, undergraduate students with web portfolios had significantly higher GPAs, credit hours earned and retention rates than a matched set of students without web portfolios. However, one must question whether these results might not in part indicate

a selection effect, since not all students chose to be in a class with a portfolio requirement.

A 2002 report on Learning Communities and First-Year Programs at BGSU indicated that the two most successful programmes were the Honours programme and a learning community including study groups, seminars, close interaction with lecturers and regular social activities. These programmes showed significant positive effects on retention, GPA and credits earned, when controlling for background variables. The study recommends the wider implementation of interaction among students and between lecturers and students, breaking down the boundaries between classroom and co-curricular activities, and highlighting linkages between classroom learning and student's other experiences.

In 2005 Centennial College rebranded itself with the concept of Signature Learning Experiences. However, not much is to be found by way of critical evaluation of the educational value of SLE, although it seems to have been successful as a marketing tool. The newspaper, *The Globe and Mail*, in writing about Centennial's facebook-style advertising campaign, quotes positive student comments about how the Global Citizenship course, a component of Centennial's SLE, had changed their perspective. Matthew Cohen, who writes for *The Toronto Observer*, highlights disgruntlement on the part of some lecturers at Centennial that the SLE was introduced while reducing the English course by one third. Some lecturers claimed that the Global Citizenship course was too broad and would do less to develop students' writing and articulateness than did the English course it had replaced. Others felt that the new course was good for developing critical thinking. These differences of opinion, and others, are also reflected in Centennial's SLE Consultation Report, completed during the planning phase of the pilot SLE. The main debating points were placement of the course, quality assurance, who should teach the course and training of staff. (For the full report, which highlights questions to be addressed during the planning stage of an SLE and which could serve as a useful reference when considering operational details of implementation, see Appendix F.)

No evaluation data are available for the following four programmes. However, their directors have provided practical advice and lessons learned from their experience in implementing SLE-type programmes.

The article by Spronken-Smith et al. (2011), reporting on their experience in implementing an inquiry-based curriculum at the University of Otago, is worth reading in full, as it provides detailed reflection on the work involved. One interesting point they mention is how the timetable can influence teaching decisions, in that lecturers may try to fit their teaching into an existing timetable structure rather than change the structure to fit the way they want to teach. They also point out how important it is to have a driver for the process, who will bring together interested academics who will take ownership and who have already "bought in" philosophically. There

should be extended conversation regarding the curriculum as a whole rather than piecemeal, and this conversation should use desired graduate attributes as its starting point. A two-year implementation plan is recommended, with student and staff feedback informing decisions. The authors also mention the value of using an external consultant, but one who has an affinity for the discipline on question. (See Appendix G for an informative excerpt from the article.)

Reporting on the pilot of Fort Hare's Grounding Programme, Keet (2010) highlighted the following: the need for "buy-in" by academics, the importance of integrating the Grounding programme into the various curricula, using the programme as a catalyst for curriculum review, the need for sufficient resources, both physical and financial, and the value of gathering both qualitative and quantitative data. For the full text of his recommendations, see Appendix H.

Dr Edna Andrews (personal communication, 23 July, 2011), the Director of Duke's "Focus" programme, reported three components that made for the success of their programme: small groups, a research orientation and transdisciplinarity, and that all three were equally necessary. She repeatedly emphasised the importance of intensive interaction and small-group learning, fifteen being the ideal group size. She also highlighted the need for lecturers to be available to students before and after class and during the week, even though this required more effort on the part of the lecturer. Other necessary ingredients were having the right people driving and offering the programme, the active support of management, and the freedom to be flexible and imaginative in the presentation of the programme.

Dr Martina Jordaan (personal communication, 29 August, 2011) commented on the following lessons learned in the running of the University of Pretoria's community-based project within the Engineering and Built Environment programmes: contact sessions have to be compulsory, personal involvement and enthusiasm on the part of the lecturer are vital, students need to feel comfortable in their learning environment, the commitment of senior and middle management is essential for success, and sufficient financial and human resources are necessary for the programme to work effectively.

While the programme offered at the University of the Western Cape is closer in content to a Life Skills/Student Life course than to the complete signature learning experience, the conceptual points raised by Dr Birgit Schreiber (personal communication, 6 September, 2011) are relevant to the implementation of a full SLE. Dr Schreiber emphasised the importance of the right "home" for a programme to ensure that it retains its desired identity. The programme/course should be seen to fit into a broader context, that is, it should help create and contribute to a particular climate and culture, Orientation/Welcoming should align with it, and study guides/course readers should show how course outcomes relate to graduate attributes. The lecturer's manner of interaction and general way of being are also crucial components of a successful programme.

The other university that gave feedback on lessons learned while offering a programme was the University of Cape Town (personal communication, 6 September, 2011). The programme coordinator and administrator, Dr Janice MacMillan and Ms Janet Small, recommended working with already existing activities and enriching and broadening those. They pointed out that the timing of activities to fit well with the university calendar was important. They mentioned several points regarding the online aspect of a module: it cannot entirely replace face-to-face interaction, it needs skillful assessment, lecturers need help with online facilitation, and presenting a module online is no less of a time commitment than contact teaching. Other recommendations were doing advertising and public relations work and having someone to coordinate the work and activities of the various participants.

Principles for implementing signature learning

Based on the foregoing information, it seems that a SLE should be

- Interdisciplinary
- Problem-based
- Organized in small learning communities
- Offered seminar-style
- Taught by lecturers with the requisite facilitation skills and approach.^{vii}
- Preceded by considerable consultation with the staff who will be responsible for implementation, to facilitate the smoothest possible delivery, respond to concerns and ensure commitment to the programme.

It should

- Foster a close and relatively informal relationship between lecturers and students
- Require students to reflect on what and how they have learned
- Allow for considerable flexibility rather than following a mandated uniform approach, while still adhering to common fundamental principles.
- Have the overt support of senior management and be provided with adequate financial, physical and human resources
- Have 'buy-in' from both students and academics.

Those involved in the SLE should be aware of what other lecturers are doing and what is happening in other programmes, in order to maximise synergy and relevance.

4. SIGNATURE LEARNING AND STELLENBOSCH UNIVERSITY

Stellenbosch University perspectives

Interviews

Notes here are limited to ideas arising from discussions with staff and students, in individual interviews and group meetings (See Appendices B, C and D). From the interviews it was clear that some people imagined an SLE to be something of short duration, probably during the Welcoming period, whereas others anticipated something of longer duration. Generally the thinking was around something taking place in the first year. The most frequently emphasised points were the need for a holistic approach, the desirability of covering a wide range of topics, the importance of having personally accessible lecturers^{viii} and the necessity of in-class discussion. There was considerable consensus that the Welcoming period should balance fun with intellectual work, that social integration should be combined with preparing students for higher education, and that this integration of social and academic could strengthen performance when classes began. This suggests that the SLE should serve as part of a longer-term academic process.

Three general comments before going into specifics: Firstly, an organisational culture of doing things well rubs off. Thus, simply by attending a university with high academic standards and efficient service students are receiving some of the signature of that university: they learn the institutional culture of “how things are done.”

Secondly, there are already some programmes in place that are very close to the conception to how a SLE would work. Thus, implementing a SLE at SU would not be starting from scratch on an entirely new venture.

Thirdly – and this may be more noticeable to an outside observer – in discussions with staff at SU the divide between students most often referred to is not socio-economic or cultural, but a distinction between residence and day students. Day students now outnumber residence students, but support structures and programmes are still largely built around the residence system, and attempts to bring the two groups together generally try to fit the day students into the residence structure. While traditions provide strength, stability and identity and are close to the hearts of generations of students, it may be well to “examine all things, hold fast that which is good” and then part with those practices that no longer serve a purpose or that disadvantage what is now the majority of the student body.

Below is a summary of ideas emanating from interviews conducted and comments from two SLE consultative meetings. Suggestions from the interviews are grouped into thoughts about the aims of a SLE, how it could be structured, the content of a formal course, modes of delivery, pedagogical approaches and matters to be borne in mind when designing the SLE.

Aims

Some of the aims listed below relate more specifically to activities that would take place during *Verwelkoming*, while others would be part of an SLE of longer duration.

Verwelkoming

Interaction

Samewerking

A sense of belonging

Instilling loyalty

Familiarity with new culture

Fun

Leadership

Meeting people

Longer term

Comfort with diversity

Information literacy

Social responsibility

Wellness

Critical citizenship

Make students aware of their potential power

Leave knowing more than just how to study

From the beginning learn how to do research

Broad knowledge

Teach correct principles so they can govern themselves

Structure

Again, some of the comments below relate more to *Verwelkoming* and others, to a longer-term academic programme.

Verwelkoming

Have Welcoming activities around a theme

Link with academic programmes

Get lecturers to participate in *Verwelkoming*

Lead from fun activities to academic activities

Balance intellectual and fun

More focus on day students

Be ready for first day of class, not exhausted

Have an activity that shows how the various disciplines complement one another

To accommodate day students, evening/weekend activities can't be compulsory

Longer term

Integrate in-class and out-of-class activities

Make use of co-curricular opportunities

Make students aware of possibilities like NGOs

Weekly informal groups – problems, victories

Lots of out-of-class experience

Include mentoring

Regular public presentations on academic topics

More physical space needed for group study and discussion

The programme can be embedded through all three years of study

The theme should be reviewed from time to time in response to staff and student feedback.

Course content

Regarding an academic course for first-years as an SLE:

- The course should develop academic skills, life skills, general knowledge and research skills.
- The course should be relevant to the surrounding community and the outside world. It should be practical and related to real life and current events. Students should be exposed to situations they will be part of when they graduate.^{ix} The SLE could also include a project that will develop awareness and a sense of social responsibility. For example, a three-or four-week project involving some kind of community interaction or community service^x could be part of the curriculum.
- Have challenging topics.
- Having a shared “text” (readings, book, film) would be advantageous.
- The arts are a valuable way to “open mental doors.”^{xi}
- There should also be a social component. Thus, sport and academic societies could be involved.
- The need for writing was frequently mentioned. All students need to learn to write, from their first year. Third-years need to learn how to write like post-graduates.
- Undergraduates should be involved in research.
- Breadth of knowledge was a frequently occurring theme. Students need a broad vision and general knowledge,^{xii} but this will have to be presented in a way that seems relevant, as students tend to balk at subjects they see as unnecessary. Whatever approach is taken, the course must develop critical and creative thinking and challenge students from the beginning. Students arrive with enthusiasm. This should be harnessed. Don't kill their passion, use it!
- Include a hospitable introduction to the technology the students will use.
- Require exposure to an African language.
- A supplement to the course could be short video clips and blogs by senior students, giving advice to new students. These could be accessible as soon as prospective students are given a registration number.^{xiii}

Modalities

There should be a range of modalities, so as to accommodate a number of learning styles.

Certainly social media should be utilised. Some specific suggestions for modalities were:

Blogging

Chat rooms

Discussion boards

Products in various modes/media

Drama

Debates

Public lectures and presentations

Conversations with senior management

Video clips

Readings

Face-to-face discussion groups

Pedagogy

From the beginning convey the importance of the SLE and show enthusiasm for it.

Choose facilitators well to ensure creation of the proper learning environment. Lecturing style is important.

Lecturers should create context, show how their subject is relevant to the end goal.^{xiv}

The learning experience must be about “having heart.”

Do things that stimulate self-directed learning and asking questions.

Develop critical thinking.

Make time during lectures for reflection and discussion.^{xv}

Have a balance of giving information and drawing from student knowledge and experience.

Do enquiry-based and problem-based learning.

Include story-telling.

Make more of student-student support. It is a natural process that can be encouraged and more widely utilised.

Tutors need to be well trained, especially in writing that requires logical exposition.

Considerations when designing the SLE

Don't overload the *Verwelkoming*.

It may be possible to build the SLE into existing curricula in the same way that Academic Literacy is. An existing course could also be re-curriculated to include service learning.

There should be plenty of consultation with student committees. Be sure that students are well represented in the consultations. Student buy-in will affect the efficacy of the programme, as their attitude towards the course will influence how seriously it is taken by new students.

Staff “buy-in” is also important. The programme will be unsuccessful if accompanied by token or fitful conformance by lecturers.

It may be better not to introduce SLE across all faculties at first, but to use as a starting point

existing programmes that are working well and where links have already been forged. It would be useful to run more than one pilot before attempting broader implementation.^{xvi}

The programme must be formalised at a high management level, not remain an intradepartmental activity undertaken by a few committed lecturers. It must be part of the university's formal plan. The correct "home" for the SLE is important. It must be placed so that the vibrancy found in existing initiatives is preserved. At an operational level it will be well to keep the management of the programme where there is existing knowledge and expertise. Involve those with passion for the endeavour, rather than simply adding the SLE to the load of a lecturer who is unconvinced of its value.

Emerging themes

Before moving on to specific suggestions for implementation at SU, it may be helpful to provide a concise summary of the foregoing information. A Signature Learning Experience should

1. Help a newcomer adapt to the university environment and requirements
2. Develop critical, analytical and creative thinking
3. Develop academic independence
4. Prepare a student to conduct research
5. Involve the student in some kind of community engagement
6. Provide a broad view, increase general knowledge and help a student to think in a transdisciplinary way.

In order to achieve this, lecturers should:

1. Be accessible for out-of-class discussion
2. Have an open and receptive facilitation style
3. Allow and stimulate discussion
4. Structure the course to accommodate co-curricular work
5. Look beyond the boundaries of their own discipline in order to be able to teach in a transdisciplinary way that addresses real-world problems.

Thus, creating a Signature Learning Experience may require

1. A certain amount of re-curriculumation
2. Adaptation of existing co-curricular programmes
3. Teacher development
4. The creation/adaptation of structures to support the Experience, including administrative support.

Recommendation for a SLE at Stellenbosch University

In the light of the requirements mentioned above, it may be advisable to adopt a phased-in approach, first working with a few departments that already have aspects of a SLE in their programme. Also, it may be helpful to implement only the more easily organised aspects of a SLE in 2012 and the broader aspects over a longer period. A workable plan might be to introduce a modified *Verwelkoming* in 2012, along with the blogging activity described below for a few volunteer departments. Courses that already have some of the required components for a Signature Learning Experience could possibly be adapted for implementation in 2012. Those aspects of the Experience that require additional timetabling and a greater degree of re-curriculation could be incorporated in 2013 and thereafter.

The approach suggested below could be described as a combination course (see “Components of a SLE,” p. 8) with elements of transdisciplinarity. Despite covering a wide range of activities, skills and content, the SLE should have a central focus and be clearly related to the aims of the Hope Project. To achieve depth, breadth and continuity, the SLE for SU could have five complementary components of different duration and timing, all built around the same focal point/theme:

- Preparing students before they arrive
- Activities during *Verwelkoming*
- Lectures and activities during the first year
- Curricular and co-curricular activities spread across the full undergraduate period
- A capstone course/experience.

Before arrival

When students are issued a registration number they could have access to a website that includes short video clips made by current students giving advice on various aspects of student life. ^{xvii}

Mention of the SLE should also be made here, so that prospective students make the connection between the SLE, their academic work and the development of graduate attributes.

During *Verwelkoming*

Have a mix of social and academic activities.

Include a hospitable introduction to the technology students will be required to use. Social networks would be an inviting introduction for those students unfamiliar with the technology.

Showcase projects that relate academic work to real-life problems.

Introduce the SLE.

Divide the students into groups of 50, comprising subgroups of 10, across faculties. Have these groups watch films as a basis for discussion of a variety of themes, such that students can see how various fields of study can be brought to bear on a particular situation. (See examples in Appendix

E and Appendix I.) The five aspects of the Hope Project would be part of this exercise.^{xviii} These discussions should be spread over a few days, interspersed with other activities, rather than covered all in one day. This will allow for breadth of discussion with time to digest information and will also allow group members to become better acquainted with each other. Lecturers should be part of these discussions, and a social activity involving lecturers would be part of the exercise.

During first year

1. Students take a Student Life class that covers aspects of academic skills and personal development,^{xix} structured in such a way that academic skills are infused rather than taught in isolation. At the moment some of this is addressed in mentoring groups. However, there is considerable merit in making the course credit-bearing, with a formal curriculum that feeds directly into skills required in the classroom^{xx} as well as addressing broader personal development and wellness issues. Such a course is most effective when there is frequent communication between the regular course lecturers and the Student Life lecturer.
2. Cross-faculty groups of 10 established during *Verwelkoming* continue, in two ways:
 - a. As a blogging group. Students will be required to post a number of blogs during the year, for example,
 - 2 reflections on being a student, one after the early assessment and one after the June exams
 - 1 on living and working with diversity
 - 1 on how what they are studying relates to the social good
 - 1 on one of the Hope themes
 - 1 that requires some personal ingenuity or creativity. (The essay topics listed by the University of Chicago – see Appendix E – are examples of the type of work that could be required. Another possibility would be some kind of creative artifact such as an essay, poem, song, artwork, related to the topic of one of the previous blogs)

Students would be required to read one another's blogs and participate in threaded discussion. A blog master would oversee activities.

b. Groups meet face-to-face, perhaps once per fortnight. The meetings would provide a space for students to air problems and celebrate victories and discuss the same themes as those listed for the bloggers as needed. These meetings, timetabled during the day to allow for participation by day students, could also be used for some of the Student Life activities.

During undergraduate period

- Research, the teaching of academic writing skills and problem-based learning infused in the

curriculum.

- Two electives required, from the following four options:
 - an African language (other than the student's home language)
 - a survey course giving a broad perspective, such as a History of Civilisation^{xxi}
 - a self-directed course in which students are required are required to engage with a number of works over three years, covering art, music, literature, film, theatre and science and technology (The Great Works course offered by BYU provides a good example of possible material. See <http://honors.fye.byu.edu/content/great-works>)
 - a seminar class including research and service components, built around a theme related in some way to the Hope project. A number of such seminars could be on offer, based on lecturer interests.
- During the three years the students must engage in some kind of service learning, community engagement or volunteer work, which may or may not be part of a course requirement.
- Departments to organise regular discussion classes addressing topics related to the discipline but not covered in any particular course. These could be a combination of lecturer-led, guest speaker presentations and institutional fora addressed by University leaders or other speakers of standing. This would be easiest to implement if there were a specific time set aside on the university timetable.

Capstone

The capstone should consolidate all work done during the undergraduate period, provide a broad view and prepare students to use their knowledge after graduation. The course may include practical work or research and address academic conventions and norms. Guidelines for capstone courses will be addressed in more detail in a separate report.

Implementation

Some aspects of the proposed Experience, such as the adapted *Verwelkoming* and the blogging/discussion groups can easily be implemented in 2012. Those aspects requiring re-circulation would be implemented in later years. There are, however, some departments where courses, projects and co-curricular activities such as those described above are already running, and these could, with slight adaptation, with slight adaptation be used as pilots to lead later implementation in other departments. Group work is already part of the cluster system, and could continue, with minor adjustments to make it more practicable for day students.

Implementing the SLE will require some structural adjustments, none of them major.

Timetable adjustments

Small group meetings: one timetabled period per week.

Discussion classes: one timetabled period per week.

Student Life classes: two periods per week? (will depend on how class is structured)

Course adjustments

In some cases electives may have to be worked into the existing programme, either as additions or by restructuring current requirements.

A project/service learning/community engagement component may be added where relevant.

Administrative adjustment

Those activities listed under “During undergraduate period” (see p. 24), and which comprise a significant portion of the SLE, will be decentralised, being housed in the faculties. However, those centres responsible for co-curricular work will also be contributing to the SLE, and coordination of its various components will be necessary. To use a musical metaphor, a conductor is needed to ensure that all of the sections of the orchestra play together and as the composer intended. A central administrator may also be required to keep track of students' fulfilling requirements and to capture marks.

Staffing

The University may decide to appoint a Deputy Director to be responsible for overseeing the SLE, working in cooperation with Faculties and Centres.

Other activities that, depending on current workloads, could be built into existing job descriptions or might require additional staff would be Student Life coordinator/lecturers and a blog master (this person might also serve as the central administrator).

Time demands on students

Time for blogging and small group meetings: approximately one hour per week

Discussion class: one hour per week

Student Life course: perhaps 80 notional hours over the year, but this could include some of the group discussion time or some kind of service or other project.

Service learning/community engagement/volunteer work: variable. Could be built into a course requirement or be part of Student Life course.

Electives and co-curricular work: will depend on whether these are added to the existing curriculum or whether curriculum is adjusted to minimise additional class hours.

The above suggestions for a Signature Learning Experience do not approach the Experience as an isolated event or stand-alone course, but as something spread over a student's whole time as an

undergraduate and requiring that students take responsibility for their learning. The proposed SLE is of broad reach. From one point of view, much of it can be incorporated with little disruption of current programmes. However, if the principles of signature learning are taken seriously, they can lead to a radical transformation of both curriculum and pedagogy. Which aspects are used, omitted or added will depend on what the University wants to achieve through the SLE.

Linda Smith

20 September 2011

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Augsburg College <http://www.augsburg.edu>

Brigham Young University <http://www.byu.edu>

Camosun College <http://camosun.ca>

Centennial College <http://www.centennialcollege.ca>

Duke University www.duke.edu

Griffith University <http://www.griffith.edu.au>

Kennesaw State University <http://www.kennesaw.edu>

Kentucky Wesleyan College <http://www.kwc.edu>

Michigan State University <http://www.msu.edu>

Ohio University <http://www.ohio.edu>

Philadelphia University <http://www.philau.edu>

Scripps College <http://www.scrippscollege.edu>

Toledo University <http://www.utoledo.edu>

University of Chicago <http://www.uchicago.edu>

University of Delaware <http://www.udel.edu>

University of Sydney <http://sydney.edu.au>

University of Texas at San Antonio <http://utsa.edu>

University of Wisconsin - Milwaukee <http://uwm.edu>

Virginia Tech – www.vt.edu

Wesleyan University <http://www.wesleyan.edu>

Endnotes

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- i Often an oblique and experiential approach works best for changing student perceptions and behaviour. For another critique of the practice of offering a course that directly addresses diversity, see Nussbaum (1997), pp.70-71.
 - ii Historically, successful students have generally been those with the requisite cultural capital, while students from less privileged backgrounds have often performed less well (Fujieda, 2009). The approach recommended in this paper may go some way towards addressing this inherited inequality. Thus, the signature learning will in itself be an application of the principles of the Hope Project.
 - iii Plutarch's statement (cited in DiCarlo, 2009, p.259) that "a mind is a fire to be kindled, not a vessel to be filled" is apposite here.
 - iv See Kuh et al. (2005).
 - v Fujieda (2009) points out that collaborative work enables students to become active learners who can assume "the rights and responsibilities of citizenship in intellectual communities which they helped create" (p. 190). This again resonates with the goals of the Hope Project.
 - vi See Appendix A for a summary of SLE-type programmes offered at South African universities.
 - vii DiCarlo (2009) remarks that "nothing reduces enthusiasm for a subject faster than poor teaching" (p.258).
 - viii Seymour (1992) points out that a frequently cited reason for students' dropping out of Science, Maths and Engineering courses is the inapproachability of lecturers.
 - ix For example, Psychology students could sit in a psychologist's waiting room, observe and reflect.
 - x Nussbaum (1997) recommends that students be prepared for cross-cultural encounters so that they do not enter the experience with false assumptions.
 - xi Nussbaum (1997) points out the value of the arts in stimulating sympathetic imagination.
 - xii This could be done by taking a theme and relating it to a number of topics which could range as widely as philosophy of science and xenophobia. Another approach could be having a weekly discussion class on topics related to a discipline but not included in any particular course offering. A further option would be requiring a certain number of elective credits from other disciplines.
 - xiii Some responses to the student survey question, "With hindsight, what do you wish someone had told/taught you earlier in your life as a student?" were, "Learn to apply theory," "Be prepared to work like you have never worked before," "Go to class more often," "Something about the fact that I won't have a great social life" (this was from a medical student), "*Dat jy baie opofferings moet maak.*"
 - xiv During the Medical School orientation the lecturers do a role-play that starts with a patient presenting with a sore leg and ends with the amputation of the wrong leg, showing along the way how the various health practitioners all play a part in the outcome.
 - xv This could mean having the occasional class in a different format, such as a coffee class.
 - xvi A survey like the National Survey of Student Engagement (NSSE), which is administered by the University of Indiana, may be a useful tool for evaluating the pilots. NSSE covers five clusters of activities: Level of academic challenge, Active and collaborative learning, Student-lecturer interaction, Enriching educational experiences and Supportive campus environment. SU responses could be benchmarked against

those found in the NSSE reports.

- xvii Prof. Ed Jakobs has already done some work in this regard.
- xviii The Hope Project focuses on eradicating poverty, promoting human dignity and health, promoting democracy and human rights, promoting peace and security and promoting a sustainable environment and competitive industry.
- xix Mentors currently present something like this in out-of-class groups. When is envisioned here is something required for all students, timetabled during the day, and presented by academics.
- xx Both Walter Sisulu University (WSU) and the University of the Western Cape take this approach. Two of the outcomes of the WSU Life Skills course refer specifically to the interface between Life Skills and mainstream classes. See Appendix J.
- xxi A survey course should not simply impart facts. It should relate to the various disciplines and show practical application. As Sipress and Voelker (2009) put it, “The mere consumption of authorized...knowledge...is unlikely to cultivate those habits of mind associated with active citizenship” (p.20).