

Open Saide

Enhancing selected educational services for a digital age

8 June 2016

Open Saide

**Enhancing selected educational
services for a digital age**

South African Institute for Distance Education

P O Box 31822

Braamfontein

2017

South Africa

Tel: +27 11 403 2813

Table of Contents

1. Introduction.....	4
A. Background.....	4
B. Saide’s Approaches and Contributions.....	4
C. A New Future.....	6
D. Strategic Vision.....	7
E. Assumptions	9
F. Team Members.....	9
2. Learning Design Framework	10
A. Introduction.....	10
B. Revised theoretical framework: Pedagogical considerations.....	12
C. Learning Design Tools.....	15
3. Saide Assets	16
A. Framework.....	16
B. Review of Assets for Open Saide.....	17
Approach to asset selection	18
Initial analysis	18
1. e-Learning Courses – fully online	18
2. Workshops - e-learning format mediated in a face- to- face workshop context (Blended).....	19
3. Workshops – paper-based content, available online in a digital format, implemented in face-to-face contexts.....	19
4. Study guides – paper-based, available online in a digital format for free download as OERs	19
5. Toolkits – paper-based, available online in a digital format for free download as OERs	19
6. Useful (individual) tools.....	19
Applying the seven facets of the UPCEA framework to the resources identified	19
In conclusion.....	20
4. Technological Developments.....	21
A. Introduction.....	21

B.	Web site development to support Open Saide	22
5.	Work streams.....	23
A.	Introduction.....	23
B.	Proposed activities.....	23
1.	Learning Design Framework Work stream	23
2.	Analysis and development of assets for Open Saide Work stream	24
3.	Web site development Work stream	24
4.	Marketing	24
	Bibliography.....	25

List of Tables

Table 1. The top 10 pages visited	21
Table 2. Resources downloaded by types	21
Table 3. Gantt chart from project work stream	Error! Bookmark not defined.

List of Figures

Figure 1. Proposed Saide's model for Core and Premium Services.	8
Figure 2. Geographical distribution of teachers and students vector.....	10
Figure 3. Extent of ICT support vector.....	10
Figure 4. Pedagogical use of ICT in education vector.....	11
Figure 5. Bloom's modified taxonomy vector.	11
Figure 6. Examples illustrating the use of the framework.	12
Figure 7. Design characteristics of the authentic tasks.....	12
Figure 6. Proposed content for the www.saide.org website.	22
Figure 7. Proposed content for the open.saide.org website.....	23

1. Introduction

A. Background

Saide currently works across all educational sectors, including early childhood development, community education, schooling, further education and training, teacher education and higher education. Within these sectors, Saide has three strands of work:

1. Supporting and developing open learning principles and quality distance education in key policy areas.
2. Supporting educational providers and programmes in the sound use of innovative course design, materials development, learner support, management, and the use of technology for large scale provision. This strand is the focus of this proposal.
3. Build knowledge about sound and innovative methods of opening learning through research, the development of resources, and the dissemination of information.

An overview of the approaches and contributions Saide has made to the post-apartheid education system are briefly described.

B. Saide's Approaches and Contributions

Saide has acted as an advocate, catalyst and facilitator of change in education policies and practices, in order to increase equitable and meaningful access to knowledge, skills and learning through the adoption of open learning principles and distance education methods.

Saide has promoted a notion of distance education that is learner-centred, with structured learning, together with integrated academic and administrative learner support systems. Examples of Saide's contribution to systemic initiatives include:

- Interpreting HEQC Criteria for Distance Education in a Digital Age – CHE
- Distance Higher Education Programmes in a Digital Age: Good Practice Guide – CHE
- Concepts Framework for Open Learning Systems in Post Schooling Education and training in South Africa.
- Investigation into the Quality Assurance of Distance Education Providers and Programme Offerings at the GEFET level.
- e-Maturity and e-Readiness Assessment in Gauteng Schools.
- A Study of the Readiness of the South African Education System to Formalise Grade-R.
- Research into Teacher Upgrading to Inform Policy Development.

Saide has also worked with public and private institutions and government departments as a critical friend, providing support for transformation and quality improvements. In particular, Saide has:

- Worked with institutions to design and deliver quality programmes using distance education methods and technology.
- Support large-scale national programmes such as NPDE at UNISA, Univen and Limpopo; HESA HIV/AIDS across all universities; ACS school management and leadership; and Asifunde Literacy Programme.

Underpinning the creation of programmes, course and materials (for example the Design Guide), Saide adopted an approach that asks five key design questions in order to develop appropriately designed programmes, courses and materials. These questions are:

- Where do we start?
- What do learners need to learn?
- How can we help learners learn?
- How will we know learners have learned?
- How can we ensure good quality?

These questions are explored more fully in Section 2 on the learning design framework. Using such an approach, Saide has undertaken, facilitated and supported (through capacity development) programmes and materials for:

- Early childhood development
- Schooling
- Mathematics for primary school teachers
- Various lives of the Study of Education modules
- Technical and vocational education and training guides

To better understand the use of educational technology in teaching and learning, Saide worked collaboratively with UCT's Centre for Education Technology using an evidence-based knowledge sharing and innovation approach to support educational technological interventions in the specific context of seven African Universities. Information and Communication Technologies were used to:

- Promote the opening of education
- Support the learning and teaching practice
- Build capacity to promote sustainability in changing learning environments
- Be adaptive to change and be mindful of context when utilising supporting technologies
- Embrace the opportunities afforded by ICTs while preserving pedagogical integrity

Saide once wrote

"... the full potential of distance provision has yet to be realised: we need to be able to turn more access into success, to work within a more integrated and collaborative post-schooling system and to create more openness and flexibility. The affordances of new technology may help us do some of this more efficiently and effectively but this requires careful planning of and investment in appropriate systems, programmes and human resources"

(A Saide Review of Distance Education Provision in South Africa Post 1994, 1995).

The challenge is to use technology appropriately to create more open-ended and dynamic learning environments that enable students to access learning and acquire the requisite competences for living and working in the 21st century.

C. A New Future

Looking to the future Saide needs to take cognisance that educational technologies disrupt not only distance education practices, but also impact on all levels of educational provision. It is this “technological imperative” that is at the core of this proposal. Building on Saide’s core philosophical intentions associated with “open learning”, “open educational resources” and “open software”, this proposal asks how Saide can make strategic use of its existing assets within a wide variety of contemporary technological environments to support and enhance future African educational developments. In addition, how could Saide conceive a range of services to support such a strategic use of its assets in order to generate additional revenue?

“Online education is evolving from amateur experimentation to a mainstream professional entity on campus—from a dubious and sporadic place on the academic periphery to the forefront of the educational enterprise. We now need to establish the full array of professional skills and services so university leaders, faculty, students, and the public at large will embrace online education as integral to academe”

(University Professional and Continuing Education Association [UPCEA], 2015 p. 1).

A move to an on-line, or e-learning, environment for on- or off-campus learners/students is complex. Providing leadership for online education is challenging. However, the UPCEA guidelines provide a hierarchical framework that can act as a heuristic to identify gaps in the assets and to support the development of the new strategic objectives. UPCEA identified seven facets of leadership and organisation development in the e-learning domain:

- 1. Advocacy and Leadership Within the University**
Recognizing that online education, by its very nature, will be an integrated and extensive facet of its university, those charged with leading an enterprise must build internal alliances, and reflect the larger goals, values, and strategies of their institutions.
- 2. Entrepreneurial Initiatives**
Recognizing that online education is inevitably about innovation, experimentation, risk, and imagination, emerging leaders must have the skills and creativity to facilitate responsible change.
- 3. Faculty Support**
Recognizing that online education is not a solitary instructional process, but one that requires extensive support and resources, leaders must envelop their faculty

with the tools they need to create education equal to, if not exceeding, that of the traditional classroom.

4. **Student Support**

Recognizing that online students demand a learning experience at least comparable to that on-campus, leaders must be ongoing advocates for students earning their degrees remotely from their institutions.

5. **Digital Technology**

Recognizing that technology creates both opportunities and anxieties, leaders must provide an environment that is current, dependable, and rich in the creative use of tools to enhance learning, interaction, and program integrity.

6. **External Advocacy and Leadership Beyond the University**

Recognizing that online enterprises must represent their institutions to an often-sceptical public, leaders must be an authoritative voice to regulators, accreditors, alumni, members of the business community, and many others.

7. **Professionalism**

Recognizing that emerging entities need policies and practices that demonstrate the integrity of a profession still establishing itself, those leading the growth of online learning must exemplify the highest ideals and contribute to a growing professional community on a national scale.

Reconceptualisation of these facets for Saide and for the African education system creates a heuristic for the evaluation of Saide's existing resources, and identification of possible areas for future development and areas where Saide might make the greatest impact (see Section 3).

To be able to provide learning opportunities that embrace learning alone at a distance as well as learning together on-campus, which might make use of technology, is difficult. The creation of a single learning design that can work in different modes and contexts can be demanding. However, the use of a framework can support such a developmental process. Earlier Saide developed a framework explored in the Design Guide (Saide, 2014). More recently the Best Practice for Distance Education (Saide, 2014) and the NIMB framework for the Department of Basic Education (Amory, Rahiman & Mhlanga, 2015) expanded Saide's understanding of learning design and provided Saide with an opportunity to reconceptualise the use of education technologies with a well-crafted pedagogical framework (Section 2).

The use of the UPCEA facets to analyse existing assets and the reconceptualization of learning design for the 21st Century align Saide's work to support future developments. Though, the question of how to generate revenue from existing and future "open" assets needs to be explored. Over the past decade software companies have developed a number of models that support the development and use of open source software.

D. Strategic Vision

A *hybrid business model* (Krishnamurthy, 2003; Bonaccorsi, Rossi & Giannangeli, 2004; Turner, 2015) has come to the fore as the dominant model that supports the development of software involving a community of programmers and companies. Value is captured, not

primarily from the software itself, but from associated services. Krishnamurthy (2003) posited that the development of open source software decreases further development costs and through added services related to the software generates a new revenue stream. These services include freely available software with support services and upgrade services to enterprise customers. Other examples of associated services include: installation, support, maintenance, distribution, marketing, consulting, training, and research and development (Bonaccorsi, Rossi & Giannangeli, 2004).

An interesting example of a hybrid model was the development of a business plan for DSpace, a digital repository for MIT libraries (Barton & Walker, 2002). Core and Premium Services were part of the DSpace plan. The no charge Core Services provided a fully functional system to the DSpace community and consumers (Interactive Services) on a hosted platform for the maintenance of the system (Operational Services). The Premium Services, offered on a fee for service basis, included services to meet the extraordinary community needs. Such services included the e-Conversion Services for the creation of digital content from non-digital material, creation of and support for the Metadata Services, provision of additional storage through the Custom Repository Services and User Reporting Services.

Such a hybrid model could offer a way for Saide to think of how to reuse its assets aligned with the principles of open learning, open education resources and open software. Core services provide no charge open access to all Saide assets. Premium Services might include support, facilitation and innovation (Fig. 1).

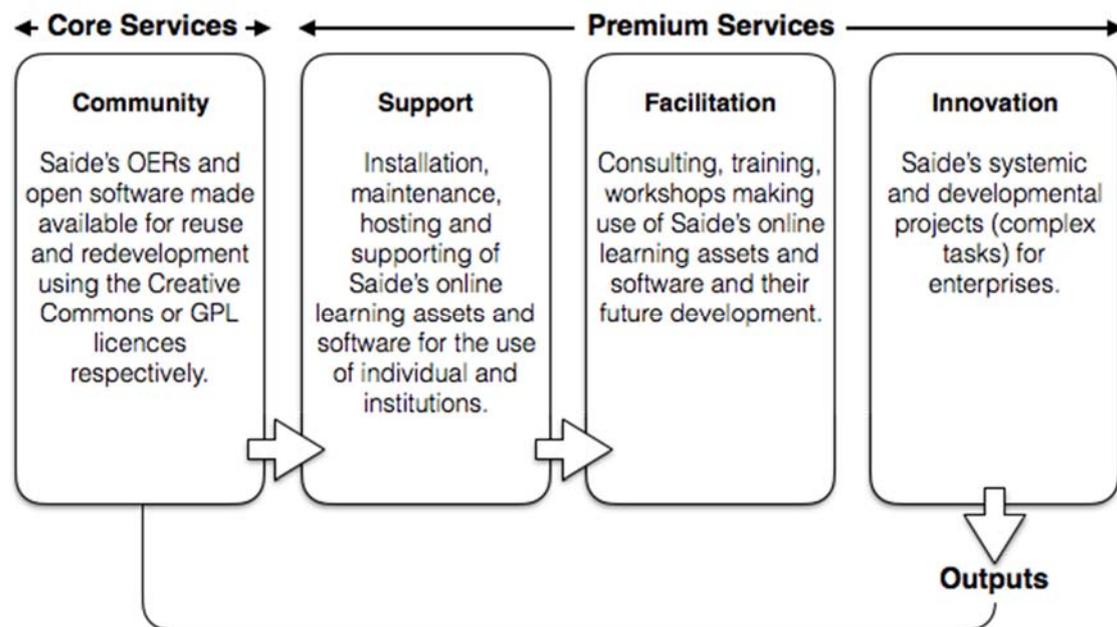


Figure 1. Proposed Saide's model for Core and Premium Services.

All assets that support institutions' development are part of the Community Services and are produced as part of Saide's systemic and developmental projects (Innovation). Installation, maintenance, hosting and support of the open assets for individuals and organisations fall within the Support Services portfolio. The use of the assets by Saide staff members in workshops or training events, or the further development or modification from a particular organisation form part of the Facilitation Services.

To realise such a strategic vision, not only should Saide's assets be reviewed using the adapted UPCEA heuristic (Section 2) and learning and course design be extended to take cognisance of current trends in learning with technology (Section 3), access to the on-line assets should be planned differently from current practices (a single web site for Saide and all the assets). A brief analysis of the use of Saide's current web site (www.saide.org.za) and the development of two new web presences, www.saide.org and open.saide.org, to support the strategic plan are discussed in Section 4. Thereafter a marketing plan (Section 5) is briefly described to support Saide's new strategic directions. The proposal finally provides details of the work plan to realise all the implied objectives and associated costs (Section 6).

E. Assumptions

- The identification of existing resources will be a collaborative effort by all Saide staff.
- The seven facets/categories are customised for the Saide context. Saide needs to define what each facet means currently and how it could be taken forward.
- A theoretical framework is in place to review existing resources.

F. Team Members

Jenny Glennie: Executive Director

Alan Amory: Senior Programme Specialist, Learning Technologies

Fatima Rahiman: Programme Specialist, Learning Technologies

Ephraim Mhlanga: Programme Specialist, Quality Assurance

Maryla Bialobrzaska: Programme specialist, TVET and Materials Development

Sheila Drew: Programme Specialist, Early Childhood Education and Course Design

Jenny Louw: Information Services Manager

Najma Agherdien: Education Programme Specialist: Learning Design

2. Learning Design Framework

A. Introduction

Since the mid-1990s Saide has made use of social constructivist approaches to support teaching and learning. The early workshops developed included activities supported by seminal resources (mostly journal articles). Participants worked together to explore, critique and reflect on a topic through the use of activities. This led to the development of the learning spiral that included: content to frame activity, learning activity, guided reflection, new activity, guided activity and repeat. The learning spiral reflects Saide's understanding of how people learn, and has guided the pedagogical approach in Saide's own teaching and design work, and also encourages others to design their programmes, courses and materials. The development of the Course Design and Materials Development Guide (2014) concretised what Saide had learnt during its first decade. The Guide addresses the five key design questions, mentioned in Section 1, in relation to different strands of design including learner context, activity-based methodology, structure (including sequence and pace of content), content (including level and progression), learner support and integrated assessment. These strands cut across programme, course and materials design.

In distance education different meanings are often associated with a single term, for example blended learning. To solve this problem, Saide thought about the context of the learning and then defined the geographical distribution of teachers and students as ranging from face to face on campus, through mixed or blended mode to fully off campus (distance education) (Fig. 2).

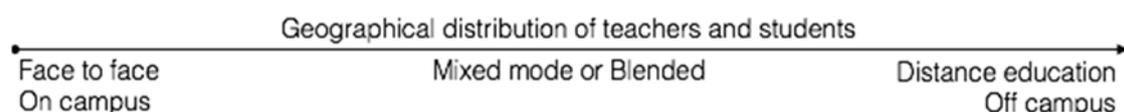


Figure 2. Geographical distribution of teachers and students vector.

Allied to this vector is one that considers the availability and use of ICT to support students (Fig 3). Within the South African education system, and especially in Higher Education, broadband access has greatly improved over recent times. Concurrently the cost of broadband has also decreased. So these two vectors are aligned to the programme delivery context.

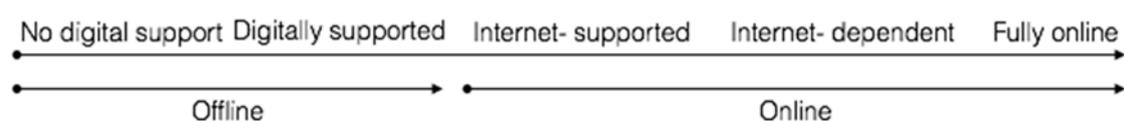


Figure 3. Extent of ICT support vector.

While the ICT support vector describes **the availability of ICT** to support teaching and learning, the pedagogical use of technology to achieve the learning outcomes, is not described. To address this problem Saide has conceptualised two additional vectors, below, which help us to think about the pedagogical use of technology. The ICT in education vector shows a continuum of **how the technology is used**: to support instruction (for example content delivery, drill and practice, skills development through repeated practice); to support cognitive development (for example, use of technology to represent information); or as a tool to mediate knowledge construction (for example to represent knowledge in different ways) (Fig. 4).

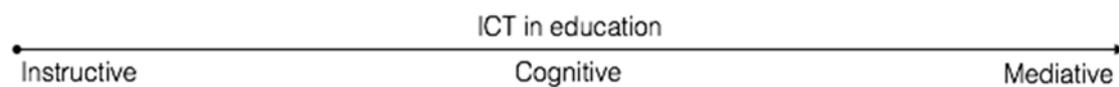


Figure 4. Pedagogical use of ICT in education vector.

The fourth vector **describes the outcome of learning**, as described by Bloom, this includes remember, understand, apply, evaluate and create (Fig. 5).



Figure 5. Bloom's modified taxonomy vector.

These two vectors will always need to be aligned to the learning outcomes of a programme. The four vectors describe the theoretical framework that can underpin all future learning and programme designs.

In addition, in order to deepen our understanding of how people learn Saide draws on the concepts of authentic learning that can structure the manner in which learning activities are created. Authentic learning includes:

- Authentic context
- Authentic tasks characteristics:
 - Real world relevance
 - Are ill-defined
 - Complex
 - Collaborative construction of knowledge
 - Reflection
 - Integrated across disciplines
 - Polished products
 - Competing solutions and diverse outcomes
 - Over a sustained period of time
- Access to expert performances
- Multiple roles and perspectives
- Articulation
- Coaching and scaffolding

This framework has been designed on pedagogically sound principles and can work across all contexts, including small and large class sizes. Saide has a particular interest, and has worked predominantly in large classroom contexts.

Two examples explore the use of the framework (Fig 6) and the characteristics of the related authentic activity (Fig. 7). A learning activity developed for students working online and at a distance is to create a storyboard for the production of a short video on how the Basic Department of Education might make use open educational materials in learning (Fig. 6a, 7a). With the use of Excel, students are asked to develop and use an instrument to investigate the use of ICTs in teaching and learning at their school and to compare results from different groups (Fig. 6b, 7b).

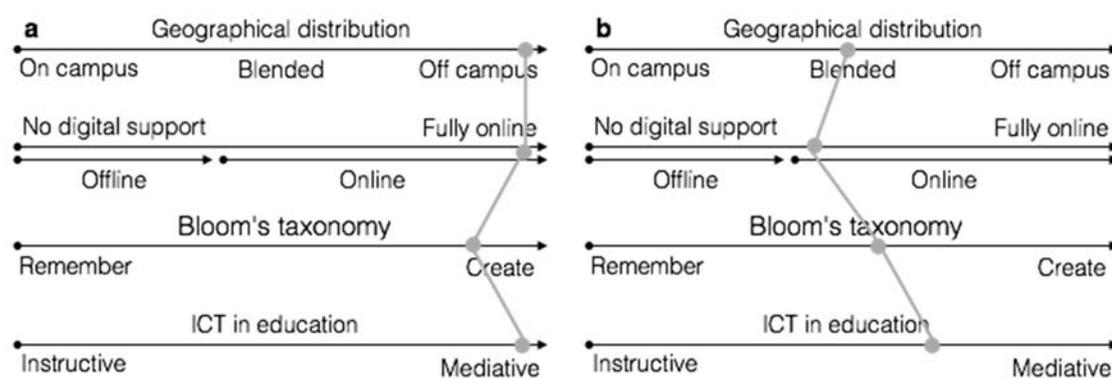


Figure 6. Examples illustrating the use of the framework

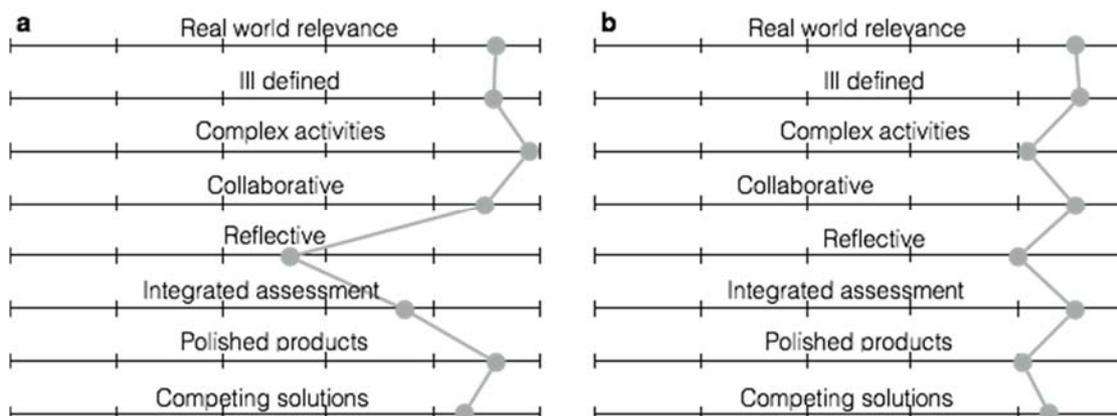


Figure 7. Design characteristics of the authentic tasks

B. Revised theoretical framework: Pedagogical considerations

Saide's underpinning theoretical framework is a social constructivist one. Learning happens collaboratively, with more knowledgeable others, through active engagement and scaffolding. This is known as the zone of proximal development (ZPD) where learning is

achieved through the help of others. Notwithstanding the value of informal learning and unintended outcomes resulting from interactions, learning is often intentional. The approach to intentional course and materials development starts with the five design questions as mentioned in (Section 1B). These five questions are:

- **Where do we start?** Included is a reflection on the purpose, audience and authentic context of the learning activity system.
- **What do learners need to learn?** Here, considerations include the objectives or outcomes of a course to assist in making decisions about content, structure, authentic assessment and lastly, the suggested learning pathway.
- **How can we help learners learn?** Key considerations involve the pedagogical approaches and methodologies that guide the design of learning activities.
- **How will we know learners have learned?** Authentic, integrated assessment, the creation of polished products, designing for competing solutions are all key.
- **How can we ensure good quality learning?** Issues around complexity, level, appropriate strategies and methodologies, amongst others, are considered. Building in continuous improvement and reflective practitioners – by way of Design research and Participatory Action Research – is particularly pertinent to quality learning.

We have included an additional five questions which deepen Saide's pedagogical considerations including how technology is used as a pedagogical tool and the focus on collective benefit - enabling communities - as espoused by Ubuntu and a transformative activist stance. The concept of tool mediation using authentic tasks is explored and will help Saide to assist educators to answer some of the initial design questions (particularly the first five as outlined in this section).

Question 1: Are we using technology as a cultural tool to mediate learning and do we reflect on the socio/economic/cultural context that tools, actors and/or practices are embedded in?

In a pedagogical activity system, actors (learners) use tools (e.g. technology, books, concepts, language) to mediate their learning. The historical socio/cultural context embedded in students shapes how they are going to use these cultural tools. Conventions and rules (such as Faculty/Departmental policies, rules of engagement, unspoken rules, etc.) need to be considered as well as the *Community involved in the activity system*. *The system requires that work has to be done* by the community - learners and educators have specific roles and tasks, often with inherent power issues, that must be performed. Tensions arise when other activity systems (such as family, work, and religious activity systems) compete for their time and attention or when, for example, the rules (policies) constrain practice. Prominent Cultural Historical Activity Theory (CHAT) scholars (such as Engeström 2001; Roth and Lee 2007) believe that these tensions must be interrogated to work towards change / transformation. This transformation warrants a reframing and strengthening of learners' critical agency focusing on engagement with a diversity of voices (i.e. listen to and not just talk about...) For example, apart from considering the questions around the learning outcomes to be achieved, the content to be covered, and the tools to be included etc., the educator could research who students are by consulting students' self-reports, inventories of prior courses or experiences, Student-Generated Test Questions, etc. but also more

directly through focus group interviews to hear their authentic voices as opposed to making assumptions about them through their own cultural experiences. Pedagogical tool usage could be guided by the learning outcome to be achieved, that is, pedagogy first and technology selection second, how and why these tools have been used historically, the embedded power relations in the learning environment, etc. through an iterative process of design research or participatory action research, 'get to know' ice-breakers, writing student case studies, etc.

Question 2: Do we design intentional, well-structured, authentic learning activities?

Learning happens incrementally (as depicted by a learning spiral) and is often intentionally designed and well-structured. In designing learning activities, authentic learning principles must be used if an outcome of pedagogical transformation (new knowledge produced through meaningful dialogue and grounded in student and educator experiences and practices) is to be attained. Authentic activities need to be ill-defined, have real world relevance, must be complex, happen over a sustained period of time, must be integrated across disciplines, have competing solutions and lastly, assessment needs to be integrated. In using authentic learning principles, enabling learning environments are nurtured and thinking and problem-solving mimicking the *real situation* is presented. By way of allowing learners to decide on the most effective learning pathways and a variety of tools to be used, acknowledgement and incorporation of learner autonomy is fostered.

Question 3: Does our activity-based approach guide curricula, teaching, assessment, and the learning environment?

According to Vygotsky (1978), learning happens on two levels (first on an external/social level and second on an internal/psychological level). With this in mind, learning experiences are designed to encourage social collaboration, while building in opportunities for internal reflection. Active engagement with content involves recalling information, comprehension or meaning-making, applying information to new situations, analysing, contextualising, and finally, creation of new artefacts. The notions of problem-solving and critical thinking are integral to an activity-based approach. It is especially important to think about how engagement takes place, if we are to deepen our understanding of teaching and learning. The implication is that context is key in pedagogical considerations. In designing curricula Saide consciously assists educators to consider decisions about what to teach, how to teach, how to assess the learning, who to include in the process of decision-making, and how praxis feeds back into rethinking these choices. Last but not least, continuous, authentic assessment and learning (e.g. students assume different roles and engage in real world practices through simulations) are integrated.

Question 4: Do we use ICTs to foster the development of higher order skills required to be creative?

Human development (learning) happens with the help of cognitive, mediative tools (technology, language, books, etc.). Whilst not everything needs to be reinvented, (acknowledging space for transmission of knowledge by an expert other) the learner is not

only a consumer of knowledge, but also a producer of knowledge. The use of technological tools lends itself particularly well to the production or creation of artefacts (e.g. Google Docs allow students to collaborate and co-create artefacts). It is this knowledge production/creation (Bloom's highest cognitive level) as opposed to knowledge acquisition (associated with remembering, instruction and reproduction of knowledge) that is sought. Saide thus proposes a *learning with technology* approach (e.g. create Blogs, presentations, infographics to explain concepts or present research) as opposed to a *learning from technology* one (e.g. drill and practice, completing quizzes, etc.).

Question 5: Are we engaging in collaborative practices where the individual as well as the collective benefit?

Saide conceptualises learning as a process of identity formation and collaboration. As we negotiate and transform actions (practices) and identities (who we are) we are constantly in a state of becoming. Not only is the individual becoming important, but so too is the collective. In designing programmes, courses and materials, we reflect on what needs to be transformed and who will benefit from such transformation. This is how we advocate a transformative activist stance (Stetsenko, 2013) – go beyond individual benefit to incorporate collective benefit (e.g. students create websites or marketing campaigns for organisations where students learn by doing, whilst the organisation gets work done or students engage in problem solving exercises related to difficult questions that particular communities are grappling with). Saide learning design thus incorporates transformative and/or socially just pedagogies.

C. Learning Design Tools

Based on the revised framework, we will design a set of tools to align Saide assets (see section on Work streams Section 6). The next section provides an overview of Saide assets.

3. Saide Assets

A. Framework

An adapted version UPCEA Facets of leadership and Change will allow us to identify the gaps and/or strengths of Saide's existing assets. Each facet will now be contextualised. Regarding Principle 1, Saide has worked extensively in the field of *good educational leadership and advocacy* across all aspects of education provision as well as all educational sub-sectors (including community/ AET). Examples include leadership and management, quality assurance (both criteria and systems) and advocacy related to a pedagogically driven approach to the use of technology in education generally, policy and advocacy related to OER, etc. Examples related to a communication plan and being committed to comprehensive assessment and evaluation include the development of the leadership component in the CHE Good Practice Guide for Distance Higher Education Programmes; the School Leadership and Management Certificate for School Principals; and The Principals' Guide for Managing ICTs in Schools.

A gap is identified in Principle 2 *Entrepreneurial leadership* where offering support to institutions (HE or other) to develop their income generating streams is not aligned to Saide's current mission and vision. In the past, Saide has been commissioned to provide services to 'for profit' institutions, mainly around capacity development; support related to course and materials design and development; quality assurance; and translation of contact programmes/ courses into distance /online provision. This is perhaps a gap that Saide might want to consider if it is to play a role in technological innovation and catering for emergent student needs. An entrepreneurial mindset characterised by creativity and originality is desirable. Possible spinoffs could be conference presentations, published papers, and/or other forms of public scholarship.

Principle 3 *Faculty support* is one where Saide has worked extensively in the area of continuing professional development (capacity building) and support for academic staff in both contact and distance education universities and TVET colleges. The range of support interventions provided to institutions by Saide has included, but is limited to online educational provision. In particular, Saide work has focussed on 1) Quality standards in programme and course design (contact /distance / blended/ online/ paper –based etc.) and 2) Learning design (instructional design). Much of Saide's work in this area has related to supporting lecturers (working both in contact and distance education) to think about how learning happens and to support the development of a pedagogic approach that is activity based, collaborative, reflective, and which focuses on formative (as well as summative) assessment.

Principle 4 *Student support* is another strength. However, as Saide does not work directly students, our work in this regard has been embedded in the professional development that we have provided to the lecturers and teachers as well as in various systemic interventions

such as Saide's current work related to the use of data analytics as the basis for developing student support systems (Siyaphumelela Project) and publication – two iterations of Supporting Distance Learners. Saide has prepared both publications and online courses on student support.

Principle 5 *Digital technology* is congruent with Saide's approach. Saide's work in this area includes preparing the CHE Good Practice Guide on Distance Higher Education Programmes in a Digital Era; support to institutions regarding selection and use of Learning Management Systems (LMSs); and professional development related to designing online courses. However, it is in this area that this proposal wishes to suggest new ways of embracing the use of technological tools. Suggested is a learning *with technology* approach (where the tool enables the production or creation of knowledge) and where we position ourselves as key role players in and contribute to an ever-increasing technological world.

Principle 6 *Extended Advocacy and Leadership beyond the University* and Principle 7 *Professionalism* which entails promoting its professional and institutional reputation are ongoing. Generally, whilst Saide enjoys a good reputation, consolidating and building confidence in Saide's offerings and creating an authoritative voice, Saide does not envisage offering this kind of support to other institutions as it is not relevant to its focus of work.

B. Review of Assets for Open Saide

As one of the first steps in developing the strategy for enhancing the provision of selected education support services in a digital age, Saide undertook a quick scan of existing assets – intellectual property and artefacts that have been designed and developed over a number years.

The purpose of this scan was to make a rapid assessment of the nature of the resources developed and educational support services offered; the mode in which we have historically delivered these resources and educational support services; and the sectors in which we have worked.

In line with our strategic vision and proposed business model, the immediate task is to harness the affordances of ICTs to enhance the reach and usage of our selected educational resources and support services. Saide is being approached more and more frequently by various partner institutions and organisations to provide educational support and professional development services related to moving programmes and courses from face-to-face to blended and online provision.

To help us think about this systematically and in a way that will promote access and quality, Saide has used the seven UPCEA facets (discussed above) to provide a broad framework for analysing our current assets and range of services and for planning a phased move to a greater degree of online provision as envisaged in the Open Saide strategy.

Approach to asset selection

A decision was taken to undertake a rapid scan of all assets produced in the last ten years (2006 – 2016). Additionally, some selected resources designed and developed prior to 2006, known to be particularly useful were also included in the scanning process.

From this period, approximately a hundred resources were identified from the following five spheres of Saide's work (support related to the following educational services):

1. Programme and course design and development
2. Learning and teaching support material design and development (including activity and assessment design)
3. Advocacy, identification, evaluation, use, adaption and licensing of open educational resources (OER)
4. Appropriate use of educational technology
5. Quality assurance of educational programmes, courses and materials

Resources or outputs from the above six spheres of project work were categorised in six types:

1. Courses
2. Workshops (e-learning/mediated face-to-face)
3. Workshops paper-based/face- to- face)
4. Study Guides
5. Toolkits
6. Useful (individual) tools

These six types were then further categorised by mode of provision, e.g. e-learning course/fully on line; e-learning workshops/blended – workshop content provided in Moodle and mediated in 1-5 day contact sessions; and paper-based (PDF) study guides provided online in a digital format.

The sphere of engagement or nature of service was also mapped against the seven UPCEA facets.

- Identifying, assessing, adapting (as necessary) and packaging Saide's existing assets – intellectual property and artefacts
- Making the selected courses and artefacts easily accessible as OERs on a digital platform (Open Saide Website)
- Augmenting Saide income by offering a range of value added support services related to the offerings available on the Open Saide site.

Initial analysis

1. e-Learning Courses – fully online

Saide has been involved in developing only one complete, fully online course (Supporting distance learning). Saide also contributed to the development of a MOOC related to the use of ICTs in education commissioned by the African Virtual University (AVU) and is currently developing a five module, online course with the Open University of Tanzania (Digital Fluency).

2. Workshops - e-learning format mediated in a face- to- face workshop context (Blended)

Saide has designed 14 e-learning workshops uploaded in Moodle. These are typically provided over a period of 1- 5 days and are mediated in a face -to- face workshop context. Topics covered in these workshops include, three generic workshops on how to use Moodle; one of the workshops focuses on learning design, another on the design of learning activities and a number of the workshops relate to the identification, use and reuse of OER.

3. Workshops – paper-based content, available online in a digital format, implemented in face-to-face contexts

This type of workshop constitutes the largest number of Saide outputs, approximately 56 of the hundred selected as part of the asset review. These 1- 5 day workshops cover a range of topics from programme, course and materials design; through student support; and a range of issues related to use and creation of OER; appropriate use of technology in education; and learning centred pedagogy.

4. Study guides – paper-based, available online in a digital format for free download as OERs

Some of Saide’s seminal work done in the mid-1990s was published jointly with Oxford University Press as the *Study of Education Series*. Two of the nine study guides that make up this series have been updated a number of times and exist in a number of editions. In 2010 Saide reached an agreement with Oxford University Press and was able to release five of the nine titles as OER. These were all updated and are all currently available on Saide’s website.

Over the years Saide has also published a number of other guides related to Vocational Education, Managing ICTs in Schools and Learning- centred Learning. In total there are nine such Study Guides.

5. Toolkits – paper-based, available online in a digital format for free download as OERs

Eleven toolkits were identified – six related to various aspects of quality assurance in distance education design and provision and open schooling. The rest relate to OER and use of technology.

6. Useful (individual) tools

Four useful individual tools were identified. Three related to quality of course and materials design and one is an online course evaluation tool.

Applying the seven facets of the UPCEA framework to the resources identified

Saide understands that the seven facets that comprise the UPCEA framework provide a strategy and structure for universities to move into a digital age by mainstreaming quality online offerings in a sustainable way by:

- Extending the reach of the university by providing new opportunities for student learning through integration of technology and teaching (both on and off campus); and by

- Augmenting institutional finances by offering income generating courses and/or support.

The rapid scan of Saide resources shows that there is an overall alignment with four of the facets: leadership and advocacy; faculty support with student support embedded in faculty support; and digital technology.

Saide resources will therefore only be mapped onto the four that are relevant to the focus of our work. It must also be noted, that while the majority of Saide's work is within the higher education or university sub-sector – supporting faculty, Saide does work across other education sub-sectors including ECD, TVET and Schooling and Adult Education and Training (AET).

Additionally, while Saide is committed to providing access for student learning through integration of technology and teaching (both on and off campus) we are mindful of our context on the African continent and the fact that access to ICT and connectivity is not yet ubiquitous. Saide's commitment to enabling access to quality education must therefore necessarily be underpinned by its responsiveness to context. Saide will consequently continue to offer off line and/or non-digital versions of its proposed courses and workshops.

In conclusion

Of about 100 resources scanned, the majority (56) related to faculty support. The content is paper-based and typically implemented in 2-3 day face-to-face workshops. The most common areas of Saide's educational services support relate to: Course and materials design and development for distance education provision; migration of courses from face-to-face provision to distance (paper-based /blended and or online); use, adaption and licensing of OER and quality assurance and programme accreditation matters.

Saide has one fully online course and 12 workshops available in Moodle but implemented in a face-to- face workshop context. Some of these include: Supporting online learners, Course design and materials development guide, Learning design in the open, etc.

4. Technological Developments

A. Introduction

Currently the Saide website (www.saide.org.za) is an amalgamation of Saide's past and present activities. The site makes use of the Drupal data with a template where mouse hover-over menu items plays an important part in navigation.

Table 1. The top 10 pages visited

Page views	Total
Home page	21.0%
Distance education key documents	9.5%
Early childhood development	8.4%
Teacher education	5.1%
About us	3.9%
Programme and course design	2.9%
Our services	2.9%
Design guide	2.0%
African Storybook project	1.9%
Our projects	1.6%
Our staff	1.4%

An investigation of the January to December 2015 to May 2016 Google analytics data illustrates that the home page attracted 21% of the traffic with pertinent projects and their outputs (such as distance education key documentation, early childhood development, teacher education, programme and course design, and African Storybook project) and information about Saide services and staff account for about another 37% of the traffic (Table 1).

Table 2. Resources downloaded by types

Resources downloaded	Total
Case Studies	1420
Modules (Guides/Tutorials)	795

Reports/Research Reports	639
Articles/Journal Articles/Open Journal Articles	378
Completed Projects	374
Policy Documents/Commentaries	345
Useful Tools/Templates	208
Other	161

The types of files downloaded (Table 2) included Saide’s case studies, guides, tutorial, academic publications, project reports, policy documents and useful tools. These two data sets clearly show that the Saide websites functions as an archive for Open Educational Resources and to inform the community of the work of Saide. These two functions can be aligned with the Community and Premium Services as proposed above. As a consequence, two websites are proposed, each with their own identity aligned to the Community (open.saide.ngo) and Premium (www.saide.org) Services.

B. Web site development to support Open Saide

The www.saide.org website will be redesigned to highlight Saide’s projects and services, with other information such as About Us, Contact, and Newsletters (Fig. 8)

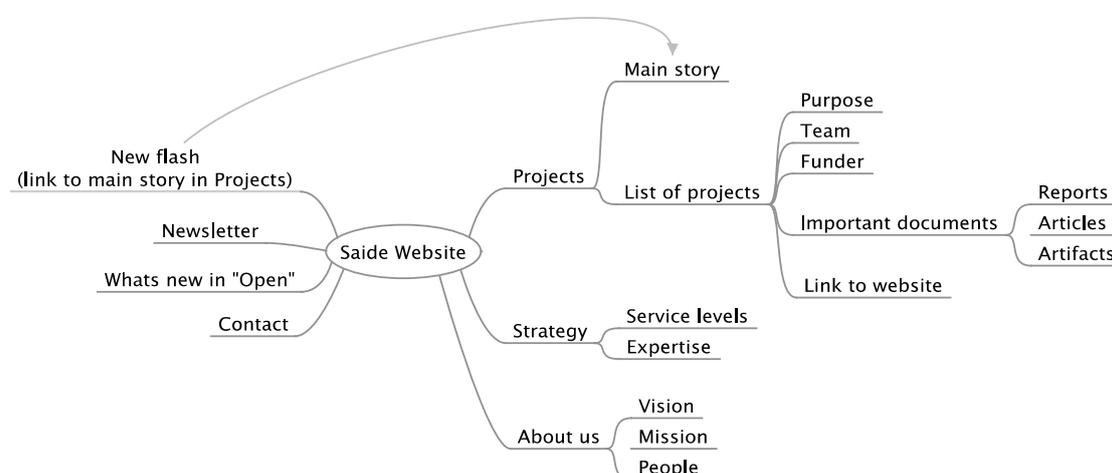


Figure 8. Proposed content for the www.saide.org website.

Community Services are collected in the open.saide.ngo website supported by customised versions of Google Search (Fig. 9). It is envisioned that open on-line courses and workshops would be part of this space. This will require investigation of a Learning Management System that can be adapted to allow individuals, or groups, to learn from these resources without complex registration processes.

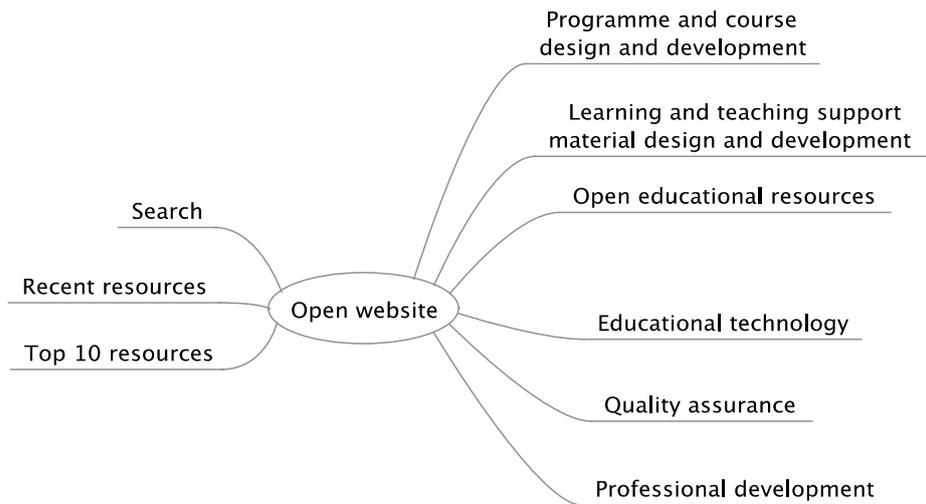


Figure 9. Proposed content for the open.saide.org website.

5. Work streams

A. Introduction

The project includes four work streams. The work associated with each work stream is described. A Gantt chart provides an overview of timeframes associated with each work stream. In the final section, the budget is provided and is aligned to the work streams as described in the Gantt chart.

B. Proposed activities

1. Learning Design Framework Work stream

The first step towards implementing this work stream is to develop a set of tools, aligned to Saide's new framework (as described in this proposal). The tools will also be used to review and redevelop our existing resources. Further, they will be used as learning resources to help Saide explain the framework when working with clients.

The second step is the review and redevelopment of existing resources (including the current Design Guide), using the tools that we have developed above. These resources will become part of our core and premium service delivery strategy. This process will also support the professional development of Saide education staff.

In the third and final step Saide will design and implement an internal Saide process for sharing and reviewing the outputs produced in the delivery of the Premium Services in order to share them back into the core Community Services.

2. Analysis and development of assets for Open Saide Work stream

The nine digitally stored study guides can be uploaded onto the Open Saide site as soon as it has been designed.

The remaining resources identified as part of the initial scan will be reviewed and a selection comprising not more than 20 additional items will be made. Any important gaps related to areas of service support will also be identified at this point.

The template/tool developed to review the remaining resources (see above) will be used to perform an analysis of the 15 selected resources. The tool will also serve to frame the development of any new resources that may have been identified as necessary to fill a key gap in Saide service provision.

Once the 20 resources have been assessed and new ones identified, the redevelopment of new resources will commence.

Once finalised, all offerings will be uploaded onto the agreed learning platform for easy access in the Open Saide website.

Six of the 12 Moodle workshops will be assessed once Saide has agreed on the type of learning platform to be used for all of its online offerings.

3. Web site development Work stream

The development of the website will be undertaken in different phases. The www.saide.org website will be developed using existing and new resources.

The development of open.saide.ngo will include three phases. The first of these will be the development of the open.saide.ngo web site excluding the e-learning component. Thereafter, an investigation of the most appropriate Learning Management System for Saide will be investigated. The final phase for open.saide.org will be the integration of the e-learning solution.

4. Marketing

A consultant will be used to develop and implement a marketing strategy for Saide to support the transition to open.saide.ngo and to market the e-learning opportunities.

Bibliography

- Amory, A., Rahiman, F., & Mhlanga, E. (2015). Rapid research on the use of ICT in education RFP-15/1116. Report for the Department of Basic Education.
- Barton, M. R., & Walker, J. H. (2006). Building a business plan for DSpace, MIT libraries' digital institutional repository. *Journal of Digital Information, 4*(2).
- Bonaccorsi, A., Rossi Lamastra, C., & Giannangeli, S. (2004). Adaptive Entry Strategies under Dominant Standards-Hybrid Business Models in the Open Source Software Industry. Available at SSRN 519842.
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of education and work, 14*(1), 133-156.
- Krishnamurthy, S. (2005). An analysis of open source business models. (Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=C14053E7241C370E8CF907E59CB28D42?doi=10.1.1.101.997&rep=rep1&type=pdf>)
- Roth, W.-M., & Lee, Y.-J. (2007). "Vygotsky's Neglected Legacy": Cultural-historical activity theory. *Review of Educational Research, 77*(2), 186-232.
- Stetsenko, A. (2013). The Challenge of Individuality in Cultural Historical Activity Theory: "Collectivindual" Dialectics from a Transformative Activist Stance (Retrieved from <http://ojs.statsbiblioteket.dk/index.php/outlines/article/viewFile/9791/7832>)
- Turner, S. (2015). Open-source software business models that create value. (Retrieved <http://www.aabri.com/manuscripts/152159.pdf>)
- University Professional and Continuing Education Association. 2015. UPCEA Hallmarks of Excellence In Online Leadership. (Retrieved from <http://www.upcea.edu/Files/Hallmarks%20of%20Excellence%20in%20Online%20Leadership%2010.1.15.pdf>)
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. London: Harvard University Press.