

DRUSSA

Development Research Uptake
in Sub-Saharan Africa

Handbook Series:

INSTITUTIONALISING UNIVERSITY
RESEARCH UPTAKE –

A FRAMEWORK FOR STRATEGY



The Association
of Commonwealth
Universities



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THE RESEARCH UPTAKE MANAGEMENT WORKING GROUP

The Research Uptake Management Working Group was constituted as a senior, specialist group in March 2014. The members, representing a cross-section of the twenty-two universities participating in the DRUSSA Programme, collaborated in a facilitated process to conceptualise a guidance Framework.

The authors were charged with documenting the emerging body of knowledge about the strategic management of university research uptake for the benefit of their university's stakeholders. The Group has chosen to compile a guidance document to be used by the DRUSSA universities, and more generally by universities that are situated a context where research can influence developmental policies and practices.

The constitution of the Group demonstrates the diversity of African universities' approaches to understanding and implementing the institutionalization of Research Uptake in ways that are appropriate for their university's implementation of its Mission, Vision and Institutional Policies and Strategies.

KEY DEFINITIONS

Research Uptake (RU) is a term used to describe a method of conducting research that includes stakeholder identification, engagement, communication and dissemination which results in evidence to influence outcomes that can have impact on the lives of poor people.

Research Uptake (RU) works in the scientific research domains. It has both a traditional focus on building, validating and disseminating to its traditional audiences the bodies of knowledge created in these fields. It also has newer and wider focus on maximising the conditions for the application of these bodies of knowledge to achieve outcomes that have a developmental impact. It has to have an additional and equally important focus: ensuring the accessibility of research findings by communicating and disseminating knowledge in different ways for different categories of users. It is undertaken in a context of rapidly improving ICT capacity and integration that provides research institutions with the means to reach multiple audiences and readerships in innovative ways.

Research Uptake is a term used by some actors in the research for development arena; other terms that describe aspects of this emerging and wide field are; research communication, science communication, research translation, knowledge mobilisation, knowledge exchange, knowledge brokering, knowledge management, knowledge synthesis, implementation research, stakeholder engagement, knowledge dissemination and diffusion and research utilisation.

Formal strategic Research Uptake Management (RUM) directly addresses an emerging area in higher education institutions' spheres of policy, strategy and operations.

It establishes and manages the capacity for an institution to demonstrate, practically and tangibly, how it uses its research engages with the communities in which it is located. It manages the processes necessary to produce evidence of scientifically validated solutions for the natural and social challenges that people face in their daily lives.

Institutional Research Uptake Management uses a "whole research cycle" model and methodology. It is a purposeful, iterative process that addresses internal (researchers and institutional) and external (funders and beneficiaries) stakeholder requirements for research evidence. It involves including a dissemination and uptake strategy when planning, carrying out, evaluating and disseminating the research, so that the resultant knowledge and information is produced in formats and on delivery platforms that are accessible and appropriate for the target readership(s)/ audience(s)/user(s).

Formal Strategic Communication (SC) is a corporate function that disseminates and reinforces messages in support of an organization's strategic plan. Communication is strategic when it is completely aligned with a corporation's mission, vision, values, and is able to enhance the strategic positioning and competitiveness of the organization (Financial Times Lexicon, 2014).

KEY DEFINITIONS	3
EXECUTIVE SUMMARY	5
INTRODUCTION	6
FRAMEWORK FOR A RESEARCH UPTAKE STRATEGY	7
TYPES OF RESEARCH	7
STAKEHOLDERS IN THE UNIVERSITY'S RESEARCH PORTFOLIO	8
UNIVERSITY STAKEHOLDER RELATIONS	9
MAKING UNIVERSITY RESEARCH ACCESSIBLE	10
UNIVERSITY POLICIES	12
THE RESEARCH UPTAKE MANAGEMENT WORKING GROUP	16
RESEARCH UPTAKE STRATEGY - STEERING MECHANISMS	17
MONITORING AND EVALUATION	17
CONCLUSION	18
Examples of Relevant Policies	20

EXECUTIVE SUMMARY

This is a guidance document for university managers charged with the responsibility of conceptualizing and documenting the institutional Research Uptake Strategy.

It describes the range of institutional policies that should be considered when a strategy is intended to achieve a specific set of results that will strengthen institutional research uptake capacity, or provide evidence that the utilisation of institutional capacity and resources does indeed contribute to economic and social development in specific ways.

It defines an important difference between Research Uptake activities undertaken by researchers and knowledge translation practitioners which has the purpose of maximizing the impact of individual research programmes and projects, and Strategic Communication which has the purpose of utilizing notable examples of research outcomes and research impact that fulfill the university's capacity to realize its Mission and Vision, and thus enhance the reputation of the institution.

It advocates for a contextual understanding of the role of the university in society, an orientation toward outward facing relationships with stakeholders and consideration of the research supply-demand dynamics and modes and methods for making research accessible and useable for multiple audiences.

It provides some examples of 'steering mechanisms' that universities can use to achieve their strategic Research Uptake strategy objectives, and introduces research capacity measurement and evaluation frameworks.

It provides a reference list of documentary resources contributed by the DRUSSA universities and its supporting network to inform decision-making about the scope and intentions of institutional Research Uptake Strategy (ies).

INTRODUCTION

There is a demand for research evidence to influence and affect development policy and practice. Universities are responding to the demand by adapting their structures, policies and processes; investing in infrastructure and specialist training, and thinking strategically about the production and dissemination of research with potential and actual impact in the contexts and for the stakeholders for which the institution carries out its mission.

Research Uptake Management is an approach to managing research information and knowledge systematically and purposefully. Because research, its outputs and its utilisation are fundamental to the achievement of a university's purpose, its governance and management overarches many policies and provides a rationale that links these policies to an actionable institutional strategy.

Communication to optimize the uptake and utilisation of research is customarily planned and implemented at many levels and by many functions within the university and is usually concerned with communication of individual projects, programmes, facilities and resources – the transformation of information and knowledge into artifacts (articles, books, conference presentations, reports, evidence papers, intellectual property) valued by the scholarly community. For individual scholars a corollary to this is that these result in personal recognition, rewards, and career advancement. Neither the scholars nor the research uptake practitioners working in these areas necessarily have an institutional focus and many are wary of institutional use of their work. But the results of their work are examples of research uptake that can be used in institutional strategic communications.

Institutional management of the communication channels and knowledge outputs for institutional benefit is research uptake management that has a different purpose. Barwick et al¹, Canadian knowledge translation practitioners(KTPs)² working in research institutions make a useful distinction between knowledge transfer

¹ Barwick, M. et al (2014) *Knowledge translation and strategic communications: unpacking differences and similarities for scholarly and research communications. Scholarly and Research Communication Vol 5 Issue 3.*

² Barwick et al specifically reference the DRUSSA Programme. "Some KTPs are connected through networks linking universities seeking to connect research to policy and practice partners (e.g., Canadian

and strategic communication which has direct relevance for the DRUSSA university leaders and champions charged with writing strategies to Institutionalise University Research Uptake.

“Because knowledge transfer (KT) [read Research Uptake] activities necessarily involve dissemination and communication of research findings, there is often considerable overlap with strategic communication (SC) roles and activities within research-relevant organizations. The plurality of responsibility for research related communication calls for greater role clarity for those who develop and implement communications within these organizations”. The article describes the “subtle differences between knowledge translation (KT) and strategic communications (SC), both of which play a role in research dissemination.” (p.3)

Barwick et al suggest that institutional strategic communications (SC) should inform stakeholders and audiences about the university’s intention to steer its research capacity toward achieving its mission and vision and persuade, by demonstrating how the dissemination and uptake of the results of research actually does fulfill its mission and vision.

In Canada SC is usually managed by the institution’s communications and publicity office, in the DRUSSA universities in sub-Saharan Africa it appears that SC may be managed primarily by the research office.

With this distinction in the location and roles of institutional research uptake management in mind this document contributes a Framework for University Research Uptake Strategy.

Caveat

A recently published DFID paper (2014)³ provides evidence that there is reason to be cautious about the impact of investment in research in international development programmes, though the report endorses the use of research to provide science-based evidence for decision-making. Universities considering their options, given their context and their limited resources, should consider where their investment in research and research capacity-building is best directed when deciding on their institutional research uptake management strategy.

Joubert (2014)⁴ in an essay published on DRUSSA.net also calls attention to a critical debate about the potential effect of an institutional science communication strategy that over-emphasises institutional reputation, and calls attention to systemic distortions.

³ DFID Literature Review (2014) *What is the evidence on the impact of research on international development.*

⁴ Joubert, M (2014) *Developing a stakeholder engagement and science communication plan.* DRUSSA Handbook Series.

FRAMEWORK FOR A RESEARCH UPTAKE STRATEGY

Universities situated in sub-Saharan Africa, are a unique type of institution with potential capacity to have significant impact – they are higher education knowledge producers, knowledge disseminators and knowledge exchangers. Research for socio-economic development is a core university function.

The DRUSSA universities are engaged in writing and/or amending policies to incorporate research uptake into their core functions, and to utilize their research strategically for socio-economic impact.

Because the formal incorporation of research uptake post-dates existing but relevant policies and strategies, it can operationalise many of the ways that universities in sub-Saharan Africa carry out their mission, vision, values and practices. It is innovative, and yet familiar. Every university attaches different levels of importance to diverse ways of getting research taken up, depending on the contexts, mandates and demands within which they flourish.

The challenge that the Research Uptake Working Group (RUMWG) meets by producing this guidance document is to situate research uptake in an institutional policy Framework so that universities can act strategically in optimizing the uptake and utilization of their research.

THE UNIVERSITY MISSION AND VISION

Every DRUSSA university's Mission and Vision documents the university's approach to its responsibility to produce research for the Public Good [of the nation and globally], by discovering and advancing scientific knowledge and contributing scientific solutions to influence planning and contribute to implementation of national development plans.

THE UNIVERSITY'S POLICY FRAMEWORK

Every university's policy framework sets out its approach to fulfilling its responsibilities for teaching, learning, innovation, research and knowledge utilization and dissemination.

The many processes for dissemination of academic knowledge to a university's external stakeholders are encapsulated in policies that encourage on the one hand, communication, publication and dissemination for recognition within the global and local academic sectors, and on the other hand communication publication and engagement with the public through community engagement, technology transfer, public engagement, commissioned research and engagement with policy-makers and influencers. This has meant that the relevance, timeliness and outcomes of research must meet external stakeholder's needs and must be communicated, disseminated and presented in ways that make knowledge accessible, transferable, shareable and useable.

TYPES OF RESEARCH

The range of research that universities carry out is broad in range and purpose.

PURE RESEARCH

This is research carried out for the purpose of better understanding of fundamental concepts within scientific field, rather than in search of a particular commercial goal or application to a specific context. Pure research generally does not produce immediately useable results, but may be used for later research into more specific and potentially influential and profitable applications. It can also be referred to as fundamental research.

APPLIED RESEARCH

This is the investigation of 'pure' or basic research to determine if findings could be used to develop new products, processes, services and/or technologies. The research is conducted to solve specific problems or to answer specific questions.

APPLIED RESEARCH FOR UPTAKE AND UTILIZATION

This is research that is conceptualized, planned and conducted in ways that optimize conditions so that the findings can be utilized in practical application and specifically for interested and affected stakeholders.

5 EVIDENCE- BASED RESEARCH

This is research that is based on sound investigation of the current body of scientific knowledge in the field, not one study or expert opinion. Typically, this means that the relevant published research studies on the topic under enquiry are referenced and assessed and the new findings contribute to the evidence-base. The published articles present the current research results in the context of the current body of knowledge, and the conclusions contribute incrementally to that body. The researcher publishes further data from the current research to support (or refute) those conclusions. Crucially, evidence-base research writing is often 'translated' or re-purposed for 'lay' readerships.

STAKEHOLDERS IN THE UNIVERSITY'S RESEARCH PORTFOLIO

The university's research profile and its capacity to demonstrate the impact of its research strengths are important indicators of its status. Effective formal stakeholder engagement which takes demands and needs of the full range of university stakeholders into consideration in formulating policies and strategies is an important element in universities' capacity to be effective role-players in delivering research evidence for developmental outcomes. Stakeholder engagement requires wide-ranging analysis, a strategic approach and methodical implementation for a university to substantiate the impact that its research plays in its 'catchment area' and with its multiple users/audience sectors.

INTERNAL STAKEHOLDERS/ USERS

PEERS

Academics, in their researcher role, traditionally and justifiably consider their academic peers as primary users of their research. Publication of research findings builds in the specialist body of knowledge.

STUDENTS

Academics, in their lecturing/teaching/supervisory role, utilize the research literature to transfer knowledge to their students; and students, particularly at the post-graduate level, learn to use the research literature to substantiate and advance the body of knowledge in their field of study.

UNIVERSITY MANAGERS AND ADMINISTRATORS

The managers and administrators of the university's research enterprise are located in functional units throughout the university, at central, faculty, institute, centre and unit levels, and in positions ranging from executive management to junior administrator. They are important stakeholders in organizing and accounting for the strategic and operational aspects and need specialist skillsets that are appropriate for their role; ranging through and including a mix of financial, legal, communicative, informational, and people management skills.

EXTERNAL STAKEHOLDERS/USERS

GOVERNMENT

Most public universities are funded substantially or in part by their government, and increasingly are being held directly accountable for the use to which funds are used. As well as the research produced within the university, which is directed toward fulfilling the demand for direct demonstration of the results and potential impact of research for particular stakeholder groups within government, universities house specialist research institutions are formally affiliated to universities and funded at least in part by their national governments. The research can be information-based, knowledge-based or result in technologies or know-how that is intended to influence users or to be used by them.

The impact of the university's research enterprise is intended to be influential but it is commonly acknowledged that the gap in understanding how best to maximize the influence of research evidence on government policy formulation, decision-making, implementation and monitoring is needs to be improved. Policy research institutes and individual academics who are generally acknowledged to be experts in a discipline and field relevant to a particular policy area are knowledge resources for government.

FUNDERS, AGENCIES and NON-GOVERNMENTAL ORGANISATIONS

⁵ Other professions also rely on evidence-based studies, but they use the terms such as "research-based," "scholarly," "academic," or "peer-reviewed" science. All these term are generally understood as "evidence-based research", but a tighter definition derived from the health research sector is gaining currency.

Definition: (Nursing Research, 2014). Applying the best available research results (evidence) when making decisions about health care. Health care professionals who perform evidence-based practice use research evidence along with clinical expertise and patient preferences

In the context in which African universities operate, the need for research evidence to influence, change and resolve developmental problems, and their capacity to manage contracts and donations makes universities a favoured institution for delivery of directed research findings. Government aid agencies and non-governmental philanthropic organisations hold the recipient institutions responsible for the utilization of the funds, the appropriate communication, dissemination and uptake of research, and ensuring its impact in order to change conditions for the named beneficiaries.

INDUSTRY

Universities are institutions where research results can lead to innovation and application for commercial purposes. Industries and businesses are users of innovations protected by intellectual property laws and regulations – continental, national and institutional. They are also users of technologies tested and incubated within universities and in collaboration with universities. And in a very broad range of fields, industry utilizes the know-how of academic researchers in consultancy agreements and contracts. This can involve management of intellectual property and confidentiality agreements and a range of other factors of importance to the parties that have to be encapsulated in contracts and agreements.

SMALL AND MEDIUM SCALE ENTERPRISES

University research is commissioned and contracted, often by third parties on behalf of SME clusters, to contribute to this vital economic sector. The results of research may be subject to intellectual property and confidentiality restrictions, but the results are often intended for public good, and thus should be made accessible and useful for the beneficiaries and for wider dissemination and uptake.

COMMUNITIES

Most universities, whether as institutions or through the relationships that academics personally forge with surrounding communities in order to fulfill their community service obligations, have a plethora of relationships in the community development sectors that they serve. Agricultural extension, public and community health, work with gender, children and women, education and literacy programmes, human rights work, legal aid services, work skills development; all are areas in which universities have long-standing stakeholder relationships where university research has influence and impact.

PUBLIC POLICY BODIES

The formal role of universities, as research institutions, in public policy in sub-Saharan Africa has not been strong, though many universities have public policy research institutes and think tanks that are formally affiliated. Leading researchers with expertise in the fields which can contribute to public policy are often called upon to serve on commissions and committees set up by government bodies at international, continental, regional, national and local levels. Their role as university-based academics is implicitly recognized by the stakeholders, but it can be the case that the university itself is not formally recognized.

From the RUMG Members: Practical Tips and Resources

- Engage industry and all other relevant stakeholders to evolve research agenda so that activities would be well embedded within the framework and needs of the organization.
- Create partnerships that allows graduate students to work with research institutes to foster collaboration as well as build capacity
- Monitoring and Evaluation of Research Practice to Ensure Quality
- Strike partnerships with some universities in the developed world to enable faculty and students take part in cutting edge research, come up with joint publications, patents and other products

Source: University of Ghana (2012). Guidelines for the Promotion of High Quality Cutting Edge Research which Advances Knowledge, Office of Innovation and Development.

UNIVERSITY STAKEHOLDER RELATIONS

Universities have a plethora of types of relationships with their stakeholders, but few formally manage the entire spread of stakeholder relationships. In order to demonstrate the types, intensity and effectiveness of its relationships to its internal and external stakeholders, they have to have in place functions and offices that record, administer and assess these relationships.

Universities' relationships with their stakeholders are complex and multi-dimensional. During the research process and over time, when taking into account the needs and demands of particular stakeholders, the relationships shift and the participants, audiences and users may have different, preferred ways of interacting with the university and with the particular researcher/research group with which it is engaged. Universities need strategic research uptake management capacity that aligns the academic enterprise with the institutional management structures, optimizes the university's capacity and manages the risks and opportunities that emerge.

PUBLIC RELATIONS AND COMMUNICATIONS

Making multiple audiences aware of the scientific capacity of a university is another way in which research can be made accessible. The public relations office formally represents the university by presenting the university's achievements to its multiple stakeholders, managing risk and generally ensuring the university's reputation is a positive one. But public relations, engagement and communication, depending on the culture and policies of a university, is not always channeled through the public relations office – as we have seen, it can be undertaken also at faculty/centre and project levels. Many universities have outward-facing facilities and institutes that have virtual autonomy in representing their research agenda and impact. The distinguishing feature of public research engagement and communication is that the channels utilized are those that reach, resonate with and are used by the range of publics, and increasingly the channels that connect best and make the most impact are digital channels.

Universities have customarily used events, print materials, newspapers and radio to promote interesting and important research internally and externally. Television is known to be an effective, though expensive medium. Now universities have to turn from intranet channels and static websites to the public Internet, web based information nodes and social networking platforms to engage with their publics. Dynamic, rapid and interactive communication modes open up opportunities and challenges in managing the reputation and impact.

An institutional Research Uptake Strategy could address the need to identify the human competency requirements and the provision of training for effective engagement, communication and dissemination

UNIVERSITY-STAKEHOLDER RESEARCH UPTAKE ENGAGEMENT

Stakeholder engagement requires the identification of new stakeholders and managing relationships with existing stakeholders, the identification of common interests and the purposes that can be served by utilizing research methodologies, findings and evidence, identification of specific problems and applicable research approaches for problem solution, and building, maintaining and strengthening relationships so that the work that is done is of mutual benefit.

UNIVERSITY-STAKEHOLDER RESEARCH UPTAKE COMMUNICATION AND DISSEMINATION

Universities tend to be 'open systems', so communication about research and dissemination of research is diffuse and purposeful, but not fully organised. In many cases the institutional role of the university is not specifically communicated and so it is weakly represented, while the roles of the stakeholders as the users of the research may, or may not taken into account in communicating and disseminating research so that the conditions for uptake and use of the research are maximised. The interests of the stakeholders (including the university as institution) are often not framed in ways that allow for formality in recording the specific objectives and outcomes of the relationships, and so it is not possible to evaluate the significance and impact of the research for any of the stakeholders. In the development context in which many of these relationships exist, the formal requirement that there is structured and planned communication and dissemination between and to identified stakeholders and beneficiaries of the process and results of research is becoming more frequent, at both individual project level and institutional level. One of the primary areas of strategic research uptake management is to have sufficient staff capacity and the range of practical skills necessary to undertake research communication and dissemination through the entire research cycle, from conceptualization to utilization, and in the interests of the university and its research stakeholders

Universities have customarily had many ways in which dissemination and diffusion of research is undertaken. Annual research reports record the academic accomplishments outputs in some detail and are a popular means of targeted dissemination in print and diffuse dissemination when loaded on web-based platforms. Events to raise awareness and provide demonstrations of research results are organized for targeted audiences and for distribution to the public through media. Academic and technical symposia and conferences are organized and speakers and guests are invited. Workshops and events for identified beneficiary groups are conducted and information and advice about research results is provided. In many universities has been significant investment in physical infrastructure; innovation centres, business incubators, technology and knowledge transfer centres, science parks; and in staffing and management of these outward-facing facilities.

Relations with media (newspapers, radio, television) are set up and used effectively. Commissioned and funded research is undertaken and research results are disseminated, in some cases very effectively and in other cases not. Many universities are now aware that it is necessary to use the internet and the new digital media platforms for dissemination of research results that are in presented in formats that are not recognized as 'academic literature' but are effective ways of diffusing knowledge – what is referred to as 'grey literature'. The potential of managed communication and dissemination of research is known, the stakeholder demand for effective ways to benefit from university research, whether as a public good or for commercial use is increasing;

MAKING UNIVERSITY RESEARCH ACCESSIBLE

There is a convention that research that is published and disseminated must be properly attributed to the authors and their employing institution in order to be recognized and legitimated. The range of external dissemination modes is changing fast as new e-publication platforms for academic articles, books and other artifacts gain legitimacy. The barriers to publication of academic research are being lowered while the virtual monopoly of certain institutions to define the way in which research is validated is being challenged. All of these factors make for a challenging environment when making research accessible for academic audiences, let alone specialist technical and commercial audiences and the general public.

OPEN ACCESS AND CREATIVE COMMONS

The open access movement is gaining traction and legitimacy, the Creative Commons copyright protocols provide alternatives to traditional copyright, and public goods information and publication platforms have been set up. Universities and their researchers who are recipients of public funds are obliged to utilize these platforms to disseminate their research.

Universities are responding to the demand for research findings produced by their researchers to be accessible in a context where their technical and human resources are not adequate and the academic culture is somewhat resistant. Ownership and protection of copyright is commonly considered to be a personal rather than an institutional matter. The cost and inadequate availability of bandwidth limits what universities can do, though conditions are improving steadily in most regions in sub-Saharan Africa.

LIBRARIES

University libraries have set up digital repositories to store and make research published by staff and students accessible through intranet and the Internet. The digitized content is made up of theses, books, articles, reports and visual and aural artifacts. Many universities are currently engaged in digitising older holdings while concurrently indexing their digital holdings to optimize the conditions for search engines to match user queries.

"Grey" literature is a generic term for research findings that have not gone through the formal academic, peer review, publication process. A distinguishing feature of research that results in such outputs is that it is, in almost all cases, the research has been commissioned – by aid agencies and philanthropic funders, governments and NGOs, industry and commerce, professional organisations and the media. In some cases the researcher is not the owner of the copyright or intellectual property and is bound by confidentiality terms, but in many others the purpose of the research evidence is explicitly to inform and influence the funders, beneficiaries and public audiences.

Universities take different approaches to establishing the criteria for making open access, public benefit 'grey literature' accessible through their digital repositories, but it is an area of management for research uptake that is generally not yet managed well.

From the RUMG Members: Practical Tips and Resources

The University of Ghana has developed a Guideline for making research findings understandable and accessible as part of its guidelines for Research Policy

A key principle of the University of Ghana Research Policy is making research findings understandable and accessible. The results of research or scholarship undertaken at the University of Ghana will be disseminated in an open and timely manner to the broader scholarly community and public in keeping with University of Ghana's mission. Critical target audiences for research findings include policy and decision makers, the private sector as well as civil society organizations. In order to reach all its audiences, it may be necessary to present research findings in formats, which are understandable and accessible, which could include non-traditional forms of presentation such as theatre, radio and documentaries

Source: University of Ghana, (2012) Guidelines for making Research Findings Understandable and Accessible, Office of Innovation and Development

INTELLECTUAL PROPERTY OWNERSHIP, COPYRIGHT AND CONFIDENTIALITY

No description, however brief, about making research accessible can neglect the complex issues that surround the ownership of intellectual property. In a university context ownership and rights to intellectual property by the institution and by the individual can be a contested area. Commissioned research, funded research and research that has the potential for development and utilization is subject to laws, regulations and contract and even ethical considerations that add to complexity.

In the last few decades as the links between research, development, social and economic development and the wealth and capacity of nations have become common currency universities have directed significant capital and human resources to the management of intellectual property for the public good, for private third parties and to protect the university's own rights and assets.

State ownership of intellectual property is another factor added to the environment in which the complexity of intellectual and copyrights must be managed. This environment has led to the growth of several fields in and allied to, general university research management. Grants and contracts offices, intellectual property offices, legal services and offices and facilities that interact directly with commerce and industry have given rise to specialisms in university research management. In this environment, making research findings accessible is a matter of contract and agreement on a project-by-project basis. In some projects, making research accessible with effective communication and engagement is obligatory, in others keeping research protected by patent and secrecy agreements obliges the university to ensure the ownership rights of the university, the researchers and the funders of the research are confidential.

From the RUMG Members: Practical Tips and Resources

- To ensure that research, inventive or innovative technologies created by the University are transferred to industry for the development of beneficial and ethically acceptable processes, products and services. —
- a) To offer equitable returns to the inventor(s) and University. —
- b) To contribute to the social and economic development of Ghana
- Take steps to patent and license the IP
- Develop modalities to recognize and/or compensate the student or employee of the University

Source University of Ghana, (2014) Intellectual Property Policy Office of Research, Innovation and Development (ORID)

UNIVERSITY POLICIES

Generally, policies are intended to govern aspects of institutional life for a considerable period. The conditions necessary for research to be taken up and utilized are implicit in many university policies. The relevance of Research Uptake needs to be referenced in every policy that has to do with making research accessible and useful.

Some universities may choose to have a separate Research Uptake Policy, many universities choose to amend existing their policies to reference Research Uptake, and opt to operationalize the implementation of Research Uptake as a core university function by devising and adopting one or more Research Uptake Strategies. The strategies have a shorter time-line than policies and include indicators of the baseline conditions, specific descriptions of progress and the conditions that are to be in place upon completion.

The range of policies that institutionalized Research Uptake can affect is wide. Some of the policies deal with the outward-facing relations and ultimately with impact, and others with internal management of interlinking strategies, and to achieve performance, compliance, measurement and assessment.

One of the emerging issues is whether research uptake will fall within research management, within the publication and communications management or whether there will be cross-functional responsibility for policy and strategy implementation. Another emerging issue is the devolution of research management from the central university functions to colleges and faculties, and yet another is the ambit of autonomy given to outward facing affiliated institutions. Yet others to consider are the incorporation of provision for research uptake capacity in human resources policies, in the academic curriculum and in institutional gender policies.

PUBLIC RELATIONS AND COMMUNICATIONS POLICIES

The broad remit of these policies is to enhance the reputation of the university, to manage institutional engagement with key external stakeholders, and to demonstrate that its institutional impact is aligned to its mission and vision.

Public engagement through science communication may be included in publicity and communications policies. In practice it is usually the end-results of research that are featured, and so it is the management of dissemination of research results that are deemed to be attractive to external stakeholders that is usually undertaken. Because science communication often has a uni-directional and end-results approach, it is not the same as research uptake, which is a whole research cycle process.

RESEARCH POLICIES

In universities the research leadership and management function generally has a broad remit, which be deduced from the naming of the offices. "Research, Innovation Production and Extension", "Research and Technology Transfer", "Research and Innovation Development", "Research, Contracts and Consultancy". The policies set up the frameworks for management of both internally facing responsibilities and external facing relations. The policies include; research standards, research integrity, research funding, research contracts, research ethics, research extension, research consultancy and research for development. Within these policies are sub-categories, for example research for development may include community engagement and extension services, knowledge transfer /exchange and technology transfer; and intellectual property, with its sub-categories of policies about intellectual property ownership rights, patents and copyright.

In the DRUSSA programme there is evidence that many of the universities are incorporating research uptake as another sub-category in the research management portfolio.

INTELLECTUAL PROPERTY/COPYRIGHT/PLAGIARISM POLICIES

For some universities the range of policies that determine the treatment of research that has potential for utilization are of primary importance. It is a complex area as the policies should set out and categorise the types of research results that should be treated as public goods, and which are to be determined to be private goods.

The rights of parties, including the state, the researcher, the student, the university, and the investors are set out.

Plagiarism has become rather common. Acknowledgement of the origin of work, attribution to the rights of the owner(s), author(s) whether the work is traditionally copyright or protected under Creative Commons is now a regulatory matter governed by policy.

OPEN ACCESS/DIGITAL REPOSITORIES POLICIES

The Open Access movement is particularly strong in public universities so these policies set out how the university will make research findings that are not protected by traditional copyright but are protected by creative commons terms digitally accessible within the university and to the international research community, by setting up and administering an electronic document repository. Latterly institutions have to grapple with ways in which their research output is not only in an accessible platform but can be found.

INNOVATION/TECHNOLOGY TRANSFER/KNOWLEDGE TRANSFER POLICIES

Many universities have invested in infrastructure and human resources to realise the potential of research that can ultimately result in knowledge and technologies that have strong utility value, and potential and actual commercial value. These policies set out the ways in which the university will govern its relations with its researchers and the external stakeholders who may invest in or purchase the intellectual property rights and how these rights will be monetized for the benefit of the parties. Generally these policies do not deal in any detail with measures to protect the public's rights to have research results 'translated' into formats that are available and useable.

COMMUNITY ENGAGEMENT/EXTENSION/OUTREACH POLICIES

There are some universities that have formal policies to position and regulate the ways in which community service is to be undertaken by staff members, while in others community and extension services are managed at College and Faculty levels, often within the student learning domains. It is a complex area of university activity in which the results of research and the research process may have an immediate impact on the participants and end-users of the research. Carried out successfully, community service delivers benefits and consolidates the university's reputation; carried out unsuccessfully it has the potential to expose the university, its staff and its students to risks that could have significant negative impact.

ETHICS/ANIMAL AND HUMAN SUBJECTS POLICIES

These policies set out the regulations and processes for the determination and evaluation of the standards that are required to design and carry out research with live subjects. The policies frame the institutional governance standards, reference national and international standards bodies, set out the obligations of the ethics committees set up by the university and address in detail the ways in which the rights of the subjects of research, particularly human subjects, will be protected. The regulations for research involving animal and human subjects are generally well-entrenched and stringent for medical research, but latterly policies have been extended to cover ethics in the social and human sciences.

HUMAN RESOURCES/RESEARCHER INCENTIVES POLICIES

Human resources policies can have significant impact on the incorporation of research uptake as a core institutional function. In public universities funded by public taxes the allocation to the institutional remuneration budget should have some relation to the overall mission of the university and to the tertiary education sector's role in socio-economic development of the nation.

The proportion of the institutional budget that is allocated to the staffing the university's academic and support functions, the remuneration policies, promotion policies and job grading systems, reward and recognition mechanisms, provision for training and up skilling govern the internal conditions which enhance or limit the level of incorporation of research uptake capacity in the day to day work of its employees.

In the current circumstances facing African universities, accessing and allocating funding for research uptake is largely dependent on funding from external sources though there is evidence that universities are beginning to use internal research funding mechanisms to oblige researchers to include engagement and communication in their research.

CURRICULUM/POSTGRADUATE TRAINING POLICIES

The composition of the curriculum is primarily an academic matter but in a developmental context is often explicitly related to national development needs and government leverages the types of learning outputs and accreditation of learning delivered by universities through different types of block grants and supplementary funding mechanisms. In universities research uptake is formally incorporated in senior undergraduate and post-graduate training in ways that are appropriate for particular academic domains and disciplines. Latterly many universities have opted to set up specialized, institution-wide post-graduate schools that are cross- and multi-disciplinary. Research uptake may be an element in research methodology training and practice, and it is a key area in which the importance of incorporating research uptake into the entire research cycle can be

introduced and relevant skills imparted and practiced.

GENDER POLICIES

Gender policies are integral to core areas of every university's performance. In respect of research and research uptake there is space for incorporation of strategies to strengthen representation of females in every area from student participation, to staffing projects, to research design to ethics and research integrity is essential. Research into gender-based issues can be leveraged by strategy that sets out conditions and expectations for research project design.

From the RUMG Members: Practical Tips and Resources

Challenges

Identifying success factors that will enable the easy translation of the research uptake vision into pragmatic series of progressive and interdependent steps in order to attain the overall research uptake goal.

Developing and encouraging a Research Uptake Culture

Providing incentives for researchers to incorporate research uptake in their projects and programmes, especially when there is no obligation placed on the researcher by the grant conditions.

Opportunities

There is interest in Research Uptake among researchers

Universities are putting in place the resources and incentives needed for outreach and other research uptake activities.

Research uptake is a new field of institutional research management that will enhance universities capacity to demonstrate examples of their mission and vision.

Research uptake is an emerging requirement for projects and programmes that, when undertaken successfully enhances the reputation of the researcher and demonstrates capacity to funders of future projects.

THE CONDITIONS FOR INSTITUTIONALISING RESEARCH UPTAKE CAPACITY

Policies provide the framework for conceptualizing and writing institutional research uptake strategies. In some universities this strategy may cover all the relevant areas in which planned changes should take place, in other universities it may be the case that several strategies will be necessary, in order to manage particular, important aspects.

It will have struck the user of these guidelines that the existing policies, regulations, and importantly the institutional culture, will frame what can be done to devise strategies to influence the allocation of resources and the incorporation of research uptake into core university functions. Each university's conditions will provide challenges and opportunities.

Many of the policies mentioned above incorporate statements that describe on broad terms how to 'steer' the way research can contribute to maximizing the quantity, quality and relevance of the university's research enterprise. Some of these policies do attend to specific aspects of getting research into use, are effective and do not need to be adapted. Others of these the policies may be in place, but in need of amendment because implementation has been weak or insufficient consideration was given to the context and resources applied to implementation. Yet other policies may refer to issues that may be implicit or not well-understood and need to be formulated and documented as a strategy; for example measures to avoid the risk of making research that is subject to confidentiality and ownership restrictions available in the public domain. Or conversely, there is a need to have strategies in place to ensure that public goods research does indeed benefit end-users.

There are areas in which research uptake strategies are yet to be formulated so that the current ad hoc ways of managing the institutional research enterprise are systematized: for example with a research uptake stakeholder engagement strategy; a research uptake communications, dissemination and diffusion strategy; a research information management strategy.

Improving the impact of research on internal and external stakeholders is dependent on the way in which the university operates. Achieving impact requires strategic and systematic management of the academic endeavor and the systems for identification, communication, dissemination, uptake and utilization of research. Research uptake strategies should set out in a focused and time-dependent manner, the plans for and resources needed to document, monitor, measure and assess research performance and impact at the institutional, relevant sub-institutional and individual levels.

Grobbelaar (2013)⁶ in her DRUSSA blog series entitled "Building institutional capacity for Research Uptake" provides a helpful set of indicators to consider when writing strategies that will result in changes to functions, systems and processes. A strategy identifies the existing positive factors that support research uptake (such as the existing attitudinal 'climate', levels of relevant expertise and skills, existing policies, functions and facilities), identifies the negative factors that limit the integration of research uptake, and should then specifically identify the factors that need to be changed, and the time and resources needed in order to reach the determined goal. These can be broadly categorized as:

Supply/push factors

- Staffing

- Training

- Information systems

- Physical assets

- Organisational resources (such as governance structures, strategic management capacity)

- Knowledge repositories

- Knowledge resources

Demand/pull factors

- Universities' obligation to recognize and meet the demands and expectations of their external stakeholders

- Universities' obligation to meet the legal, regulatory and governance requirements of their external stakeholders

- External stakeholders' recognition and use of knowledge produced at universities

Exchange factors

- Facilities, both physical and non-physical to access, share and diffuse knowledge

- Internal and external support for university-external stakeholder engagement

RESEARCH UPTAKE STRATEGY - STEERING MECHANISMS

The DRUSSA universities have already, or are on the way, to putting in place 'steering' mechanisms that are relevant for their strategies to achieve institutional research uptake goals:

- Proposals that incorporate stakeholder engagement and research uptake communication are favoured when internal research funds are distributed.
- Incentives are made available to staff to participate in public engagement events.
- Incentives are made available to staff who publish in open access publications.
- Support is given to staff who apply for external grants and funding that require uptake and utilization of research by the grantee/commissioning body.
- Formal recognition is given to researchers who are successful in getting research taken up and utilized.
- Regulations are in place to determine how staff may provide expertise and consultancy services to external stakeholders.
- Teaching and practice of research methodologies, research integrity and research ethics is incorporated in the curriculum at both the under- and post-graduate levels and is monitored through supervision and grading.
- Specialist research uptake administration posts are being established or incorporation of research uptake in research and development posts is being formalized.
- Research uptake communication skills needs are being identified.
- Research information administration skills needs are being identified.
- Administrators and researchers are being sponsored to attend research uptake training courses.
- Specialist qualifications at PhD and M Phil levels in Research Uptake and Utilisation are available.
- Research information databases are being developed, and/or existing research information databases and repositories are being adapted to include data about projects with research uptake potential, stakeholder engagement and communication and end-user dissemination.
- The need to incorporate research uptake engagement, communications and dissemination in research design and throughout the research cycle is recognized and is becoming a requirement for funding allocations.
- The need for research information systems to monitor and evaluate compliance with research uptake requirements and the extent and impact of research uptake and utilization is recognized.
- Formal performance targets with timelines and achievement indicators; for the university, faculties and individuals are being put in place at some universities, and the need for these is generally recognised.
- The need to formalise and centralise information about current relationships with external stakeholders is recognized and there are systems in place, but which may need to be adapted.
- The institutional representative and 'ambassadorial' roles of executive management is formally managed.
- Facilities are in place to allow organized commerce and industry, entrepreneurs and the small business sector to access knowledge and resources.
- Initiatives to strengthen networks and further formalise channels that link the university with commerce and industry are in place, but may need adaptation.
- Initiatives to strengthen networks and further formalise channels that link the university with policy influencers, decision-makers and government are underway.
- Ways and means to feature research in understandable, accessible and attractive formats on the universities' websites and digital information sharing platforms are being explored.
- Relations with public media, as effective communications intermediaries, and well as influential disseminators are in place.

MONITORING AND EVALUATION

A research uptake strategy identifies the 'steering mechanisms' that are relevant 'drivers' of the desired change, or changes. The strategy should outline the research uptake implementation plan, set timelines for achievement of results, set out the plan for monitoring and results assessment and identify the evidence that will be required to substantiate the institution's impacts on global, continental, regional and national socio-

economic development.

The research uptake strategy should identify the key indicators that describe what will be measured, what will count as a baseline condition, what will be tracked and recorded and what will count as a result, so that assessment of the effectiveness of the changes is done from pre-identified elements of the strategy. The indicators should be both qualitative and quantitative. The strategy will identify how progress will be monitored and will describe how the resulting changes will be reported as contributions to the achievement of the university's mid- and long-term goals.

The ESSENCE⁷ group has produced an M&E Framework for Research Capacity Strengthening⁸ for development of the public health sectors in LMICs. It is pertinent for the DRUSSA Programme as it focuses on both individual and institutional research capacity strengthening.

Grobbelaar (2013)⁹ advises that monitoring and evaluation at institutional level should track progress and change in individuals, programmes, school/faculty/colleges and central support functions.

- Individual: Universities should build individual capacity so that RU activities can be tracked. For example, what projects are they involved in? Does the research have potential for uptake? With and for whom is the research being undertaken? What communication and dissemination mechanisms are being utilized?
- Programme: Evaluation frameworks should be in place to track whether programmes meet their objectives and intended outcomes, while impact should be tracked along scientific, practical and policy criteria.
- School/Faculty/College: Strategic initiatives should be designed to be implemented at every level so as to track progress around the establishment of a conducive environment, the adequacy of access and exchange points for effective external stakeholder relationships, sufficient capable facilitators and communicators, and internal incentives that acknowledge and reward achievements.

To this should be added:

University: a thorough institutional evaluation also needs key indicators to be identified so as to assess the effects of 'system' changes. Are the results of implementing the strategy (ies) perceived by external stakeholders to be of a high standard, attractive and effective? In a dynamic and complex institution such as a university, where it might be possible to put in place a limited set of indicators, consideration and adoption of methodologies that allow for different types of information gathering for monitoring and evaluation should be considered. The DRUSSA programme has used a Benchmarking¹⁰ methodology that identifies some quantitative measures but has the primary purpose of presenting information to be shared and compared. Another M&E methodology that has gained considerable attention is the Most Significant Change Technique¹¹. This could be used within the university to identify and track institutional changes.

7 "ESSENCE on Health Research (Enhancing Support for Strengthening the Effectiveness of National Capacity Efforts) is a collaborative framework between funding agencies to scale up research capacity. It aims to improve the impact of investments in institutions and people, and provides enabling mechanisms that address needs and priorities within national strategies on research for health." <http://www.who.int/tdr/partnerships/initiatives/essence/en/>

8 ESSENCE (2011) *Planning, Monitoring and Evaluation Framework for Capacity Strengthening in Health Research*

9 Grobbelaar, S (2013) *Building institutional capacity for Research Uptake. DRUSSA Handbook Series.*

10 Falk, E. et al (2014) *DRUSSA Benchmarking Report 2014. Summaries and analysis from the 2014 DRUSSA benchmarking survey.*

11 Davies, R and Dart J (2005) *The Most Significant Change (MSC) Technique: a guide to its use.*

CONCLUSION

The process of getting the research uptake strategy (ies) formally validated and accepted will be contingent on the formal governance systems that are in place in the university. In some universities these strategies have been embedded within the policies, in others there are stand-alone strategies and guidelines.

The University of Ghana has included its research uptake guidelines in its suite of policies. Kwame Nkrumah University of Science and Technology's Academic Board accepted the Research Uptake Strategy as an integral part of its research policy. Addis Ababa University's research uptake strategy is embedded its Strategic Plan 2014-2017 and supporting documents. The University of Mauritius has decided to initially pilot a research uptake strategy at faculty level. The University of Nairobi has embedded research uptake in newly adopted policies; Communication, Extension and Outreach. The University of Fort Hare has opted for a stand-alone Research Uptake Policy, adopted a Research Uptake Strategy and is now operationalizing it in a demonstration programme. Cape Peninsula University of Technology's Blueprint incorporates its strategies to utilize its resources to realize its technology mission. The RUMWG members hope that this framework document will assist other universities that are still in the process of considering and writing their research uptake strategies.

Examples of Relevant Policies

Research Uptake		
	University of Fort Hare	http://www.drussa.net/getfile.php?id=2324
Public Relations and Communications		
	University of Nairobi	http://www.drussa.net/getfile.php?id=2523
Research		
	Addis Ababa University	http://www.drussa.net/getfile.php?id=2540
	Cape Peninsula University of Technology	http://www.drussa.net/getfile.php?id=2158
	Makerere University	(still to be uploaded 2 docs)
	Moi University	http://www.drussa.net/getfile.php?id=2515
	University of Buea	http://www.drussa.net/getfile.php?id=2393
	University of Botswana	http://www.drussa.net/getfile.php?id=2530
	University of Ghana	http://www.drussa.net/getfile.php?id=2536
	University of Ibadan	http://www.drussa.net/getfile.php?id=2537
	University of Limpopo	http://www.drussa.net/getfile.php?id=2526
	University of Mauritius	http://www.drussa.net/getfile.php?id=2546 and http://www.drussa.net/getfile.php?id=2527
	University of Nairobi	http://www.drussa.net/getfile.php?id=2512
	University of the Free State	http://www.drussa.net/getfile.php?id=2520
	University of Zambia	http://www.drussa.net/getfile.php?id=2151
Intellectual Property, Copyright and Plagiarism		
	Kenyatta University	http://www.drussa.net/getfile.php?id=2531
	Makerere University	http://www.drussa.net/getfile.php?id=2560
	Moi University	http://www.drussa.net/getfile.php?id=2513
	University of Ghana	http://www.drussa.net/getfile.php?id=2535
	University of Ibadan	http://www.drussa.net/getfile.php?id=2150
	University of Limpopo	http://www.drussa.net/getfile.php?id=2528
	University of Nairobi	http://www.drussa.net/getfile.php?id=2079 and http://www.drussa.net/getfile.php?id=2542
	University of Nairobi (Plagiarism)	http://www.drussa.net/getfile.php?id=2543
	University of the Free State	http://www.drussa.net/getfile.php?id=2511
Open Access/Digital Repositories		
	Kenyatta University	http://www.drussa.net/getfile.php?id=2105
	University of Botswana	http://www.drussa.net/getfile.php?id=2099
	University of Fort Hare	http://www.drussa.net/getfile.php?id=2103
	University of Nairobi	http://www.drussa.net/getfile.php?id=2101 and http://www.drussa.net/getfile.php?id=2544
Innovation/Technology Transfer/Knowledge Transfer		
	Addis Ababa University	http://www.drussa.net/getfile.php?id=2538
	Cape Peninsula University of Technology	http://www.drussa.net/getfile.php?id=2158
Community Service/Engagement /Extension/Outreach		
	Kenyatta University	http://www.drussa.net/getfile.php?id=2532

	Moi University	http://www.drussa.net/getfile.php?id=2514
	University of Fort Hare	http://www.drussa.net/getfile.php?id=1994
	University of Limpopo	http://www.drussa.net/getfile.php?id=1996
	University of Nairobi	http://www.drussa.net/getfile.php?id=2541
	University of the Free State	http://www.drussa.net/getfile.php?id=2521
Ethics		
	University of Ghana	http://www.drussa.net/getfile.php?id=2534
Human Resources/Researcher Incentives		
	University of Limpopo	http://www.drussa.net/getfile.php?id=2526
Curriculum/Postgraduate Advancement		
	University of Rwanda	http://www.drussa.net/getfile.php?id=2522
Gender		
	University of Nairobi	{internal document – not accessible}
Examples of Research Uptake Strategies, Guidelines, Manuals		
	Kwame Nkrumah University of Technology	http://www.drussa.net/getfile.php?id=2214
	University of Fort Hare	http://www.drussa.net/getfile.php?id=2353
	University of Mauritius Faculty of Agriculture	http://www.drussa.net/getfile.php?id=2529
	University of Ghana	http://www.drussa.net/getfile.php?id=2546

Supplementary reading

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<http://src-online.ca/index.php/src/issue/current>

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https://www.gov.uk/government/.../Research_uptake_guidance.pdf

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Nursing Research (2014). Northwest College, Wyoming.

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