AgShare Toolkit

Here you will find resources to help you develop open, high quality, localized content and research that follows best practices. The AgShare Quality Assurance Toolkit is meant to provide resources which can be used and referred to by trainers, faculty, staff and graduate students to assure that outputs for research and farm communities will follow best practices.

About

Agshare is a unique project which aims to improve the livelihoods of smallholder farmers through participatory action research from graduate students guided by Faculties of Agriculture and Veterinary Science to produce open high quality localized content and research.

The AgShare Toolkit provides resources that can be used and referred to by trainers, faculty, staff, and graduate students to assure that the outputs developed for research and farm communities will follow best practices.

To learn more about the AgShare project, please visit www.oerafrica.org/agshare

Quality Assurance Process

When developing localized content and research for open use, the quality assurance process must consider several steps. These steps or "stages" are listed below linearly, but may indeed also occur simultaneously. Explore each stage to learn best practices for content development:

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Stage 1: Planning for Publication

Understanding Quality Research and the Peer Review Processes

For Agshare projects to be successful, faculty and students need to plan projects that will meet rigorous quality standards. Projects must incorporate quality research practices into the design of work.

Agshare projects publish multiple types of outputs including peer-reviewed research. Ideally all outputs are created with the intention that any output would be peer-reviewed. Incorporating quality research and peer review quality into the initial design of materials for research publication, classroom use or outreach/extension will prevent multiple rounds of editing and increase the quality and relevance of the material.

Specific to the planning stage, projects must meet five criteria:

1. Developed jointly between student, faculty member and end-user
2. Targets a particular "real world" problem within a subject area and have specific objectives
3. Fulfills graduate student requirement for a degree program
4. Improves and enhances the content of graduate courses in the subject area
5. Provides information to surrounding communities to aid in solving the problem.

Once a potential project idea is conceptualized, its quality will be assessed by subject matter experts (faculty members) who must verify that the concepts that the project addresses are sound and will make a significant contribution to the subject area or discipline. Upon completion, faculty and students must obtain feedback from stakeholders (farmers) to assess the impact and success of the project.

Stage 1 Tools

Quality Standards Measurement and Evaluation Template *Use this template to describe the quality standards of a research project and the measurements you can use to evaluate them.*

Research Project Process Checklist *This checklist can be used in the planning stages of a research project and includes suggested steps for developing a research project and specific criteria for each step.*

Stage 1 Resources

Evaluation Criteria for Peer Reviews (MERLOT) *An evaluation criteria which potential authors or reviewers can use to provide feedback.*

Peer Review: A Guide for Researchers (Research Information Network) *Provides researchers with an understanding of how peer review works and highlights some of the issues surround the current debates about the peer review process.*

Stage 2: Students as Change Agents

AgShare Scholars (Translational Scholars, Participatory Action Research)

Agshare, like RUFORUM, envisions that MSc students in agriculture are skilled enough to produce independent research outputs that positively impact the smallholder farmer. One of the main tenets of Agshare is to:

> ***increase students' capacity to conduct meaningful, high quality independent research which is widely shared under an open license and adds demonstrable research to the student's resume.***

In the AgShare model, graduate students need to be trained by faculty and staff on how to do high-quality research, make that research usable for smallholder farmers, and publish openly licensed multi-media resources. Through this process, students are moved out of the classroom to gain valuable on-ground experience with agriculture stakeholders through participatory action research.

The nature of participatory action research requires students to be capable of translating science-based concepts to be meaningful to farmers. They must be able to

- identify problems or issues being faced by the local community/farmers
- use the knowledge that they acquired through their degree problem to develop a feasible solution
- deliver that information to the community to help tackle the problem.

These 21st century skills will make students more valuable to the agricultural transformations that need to occur in Africa.

There is a great need for local resources in Africa and graduate students can address these problems by learning how to create openly licensed materials. The RUFORUM Theory of Change provides a systematic and succinct model for the process flow of these transformational changes. Of particular importance is engagement of graduate student, faculty supervisor and farmers in developing and implementing student projects.

Stage 2 Tools

Translational Scholar Exercise *This document helps faculty conceptualize the concept of using translational scholars as part of their research.*

Research Problem/Solution Template *A tool faculty and students can use to rank potential solutions for research problems.*

Stage 3: Designing Open Educational Resources

What are Open Educational Resources?

When developing content that will be available as an **open educational resource** (OER), there are several design specifications to keep in mind. In this section we will go over those best practices and provide tools and guidelines to help you develop high quality, OPEN materials.

Let's start with a definition of open educational resources:

> ***OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.***
>
> ***– The William and Flora Hewlett Foundation***

Benefits of OER

Here are a few of the many benefits of using and producing open educational resources:

- **Awareness:** Expands the reach and dissemination of materials, therefore increasing brand recognition.
- **Connection:** It is a new way of teaching and learning that is more collaborative and participatory. The shared content becomes a vehicle for collaboration and connection.
- **Preservation & Improvement:** Materials are not lost after use but preserved digitally. Shared materials are continually improved upon through iterations.
- **Access & Efficiency:** Contributions to a pool of learning resources can circumvent barriers to access and improve education as a social good. Materials can be adapted and localized to fit the needs of a specific audience. It saves time, cuts costs, and reduces duplication of effort.

Best Practices for Producing OER

Follow these design practices when building your open curriculum and e-Learning materials:

START WITH OPENNESS

Keep openness in mind from the very beginning of the curriculum/material development process. This means that as you build your curriculum or resource, you are doing so with the intention of sharing and making it accessible.

USE OPEN CONTENT

When putting together your curriculum or material, only use open content. This means that anything in your resource that you have not created yourself is openly-licensed. You can find openly-licensed courseware, images, clip-art, learning modules, and other relevant materials. Here are some places to start looking for openly-licensed materials:

- AgShare Online Resource Guide
- Creative Commons Search
- Openly-licensed Flickr Images
- OER Commons
- OpenCourseWare Consortium
- Multimedia Educational Resource for Learning and Online Teaching (MERLOT)

CITE YOUR SOURCES

Make sure you correctly cite your sources and give attribution where it is due. Open does not mean you can just take without attributing the owner of the work. It means you can freely use it under the specifications set by the copyright holder.

Stage 3 Tools

Choose a Creative Commons License *A tool to help you determine which license is right for you.*

Share Your Content (open.michigan) *Learn how to use openly-licensed content to create presentations, websites, and other resources that you can legally share with educators, collaborators, and self-learners worldwide.*

Stage 3 Resources

A Basic Guide to Open Educational Resources (OER) *Basic introduction to OER developed by the Commonwealth of Learning.*

Guidelines for Open Educational Resources (OER) in Higher Education *Outlines key issues and suggestions for integrating OER into higher education to support quality teaching and learning.*

E-learning Quality Assurance Standards, Organizations and Research *List of international quality standards for e-Learning.*

LICENSE YOUR WORK

By designating a Creative Commons license on your material, you are letting others know how you want them to use your work. Make sure you put the licensing information on all of your materials including presentations, documents, and videos.

- Creative Commons Licenses
- How to Display Your License (open.michigan)

For more information on using and producing open educational resources, please refer to the tools and guidelines on the right side of this page.

Stage 4: Publication

Publication of research remains paramount for faculty, staff and students. If the quality assurance guidelines are followed, finding outlets to publish should be improved. However, Agshare itself adheres to the principles of open publishing and as such recommends that authors make every effort to publish in an open journal. Faculty members and students are encouraged to produce derivate works from traditional research publications that can be made available in open journals.

Outreach and agricultural extension-style publications are some examples of derivative works from traditionally published research. A special publication from the Journal of Asynchronous Learning Networks, on Online Learning and Open Educational Resources for International, Rural and Hard-to-Reach Populations will be available in late July 2013 and will feature work from authors on Agshare projects.

Stage 4 Tools

Journal of Asynchronous Learning Networks - July 2013, A Special Issue on OER and Online For International Rural, and Hard-To-Reach Populations (search for Volume 17, Issue 2) *This issue showcases projects and trends which, when combined, are changing the scope and reach of education and includes examples from AgShare projects.*

How to Get Your Journal Article Published, by Sage Publications *This guide includes tips for publishing articles.*

Publishing Your Research 101, By ACS Publications *This video describes the initial steps of publishing research including when to start thinking about publishing, writing while conducting research, and new technologies.*

How to Publish Your Journal Paper, by the American Psychological Association *Advice for publishing a journal paper.*

Stage 4 Resources

Directory of Open Access Journals *Browse for journals based on subject, country, license, and publication charges.*

Journal of Asynchronous Learning Networks *Articles based on asynchronous learning networks (ALN) and a great resource for online learning information.*

Stage 5: Internet Dissemination & Discoverability

The measure of success for AgShare will be the uptake and use of the project outputs by educational institutions and targeted communities. In order to make the resources accessible, the digital materials will be published online on various sites including:

- OER Africa AgShare Repository
- RUFORUM Open Education Resources

In addition to the sites above, institutions are encouraged to take an active role in publishing and disseminating their own digital content. There are resources and guidelines established specifically for dissemination of agricultural research outputs such as Coherence in Information for Agricultural Research Development (CIARD) and Agriculture Information Management Services (AIMS) which outline best practices for agricultural knowledge management.

If your institution does not have the capability to upload on internal servers, faculty and staff should share those resources with OER repositories, especially those which have agriculture related resources such as:

- African Journal of Agricultural Research
- AgEcon Search

Stage 5 Tools

OER Africa, AgShare Repository
Resources produced by AgShare partner institutions.

Coherence in Information for Agriculture Research Development *A movement for making agricultural related research more accessible through open content and building capacities.*

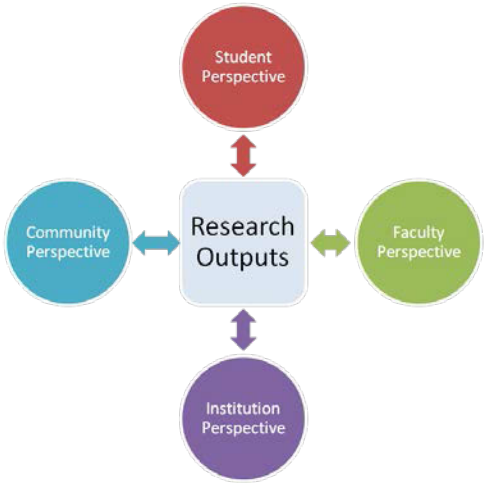
OER Africa list of OER and OCW resources
A resource list of OER repositories, sources, and tools.

Stage 5 Resources

FAO Agriculture Information Management Service (AIMS)
A community based resource for agricultural information.

Stage 6: Review & Revise

Creating a sustainable process requires that institutions participating in Agshare create their own internal mechanisms to ensure that openly licensed materials are of high quality. Each institution will need to customize their evaluation process based on goals of the institution, types of research projects conducted and the purpose of the outputs. The process should be iterative, allowing for updates to both subject matter and technical aspects of the materials.



Even though each institution will have its own goals for the review process there are common perspectives which should be thought through as review instruments and approaches are developed. The common perspectives should be based on analysis from students, faculty, institutions, and the community. Following are questions which may be asked from each perspective.

Student Perspective

- **Intended Outcomes:** Do the results of the research project match the intended outcomes of the project? Are there additional outcomes that exceeded the intended outcomes?
- **Explanation of Research:** Do the outputs tell the story of the research project? Are there any missing elements including challenges or stories of success?
- **OER Requirements:** Are OER requirements met for publishing as an open resource (licensing, no 3rd party content)?
- **Selection of Technology Tools:** Have the most effective technology tools been selected in order to most effectively tell the story of the research project (web site, video, manual, audio clips)?

Faculty Perspective

- **Peer Review:** Have other faculty members reviewed the outputs?
- **Dissemination:** Have locations been selected for posting the research results and outputs?
- **Continuous Improvement:** Have the strengths and weaknesses of the materials been analyzed for improvement? Has this information been given to the student?
- **Gap Analysis:** Has the research been reviewed in order to find gaps in the research process?

Institutional Perspective

- Strategic Thinking: How does the research align with the strategic plan of the institutional and/or department?
- Discoverability: How can materials produced from the research integrate into teaching, as well as other research projects? How do you make the results visible to other faculty?

- Reputation: How have results of the research influenced the perception of the institution?

Community Perspective

- **Improvement:** Can community members use the research outputs within their livelihoods to improve their practices?
- **Impact:** How has the research influenced the community over a segment of time? Have community members changed their way of thinking or perspective?
- **Analytics:** Have community members accessed the research outputs?
- **Evaluation:** Have community members had the opportunity to give feedback on the research outputs?

After all of the applicable perspectives have been considered, revise material as necessary. Repeat this process on a continuous process to ensure long-term quality of materials.

Stage 6 Tools

AgShare Research Project Review: Student/Faculty/Institution/Community Perspectives *Use this template to document the review process by research students, faculty, institutions, and members of the community.*

Video Creation:

- How to Create a Storyboard for Your Video Shoot
- Pros & Cons of Shooting Business Videos with a Mobile Phone [ReelRebel Ep#42]

Example of using video with research:

- Digital Green
- Benefit of Using the River Pump
- Wheat Line Planting

PowerPoint Tutorials:

- Powerpoint 2010 Tutorial - Record Narration for a SlideShow
- PowerPoint: Basic Slides for Beginners

A Guide for the Dissemination of African Agricultural Open Educational Resources

"You see, in the West, the basic economic and social unit is the individual. The American will say, "I am because I am. ...In Africa, the Africans say, " I am because we are." The "we" connotes community." - George Ayittey TEDGlobal 2007

Introduction One of the most significant challenges facing agricultural education in African educational contexts is the prevalence of out-of-date teaching materials[1]. Fortunately, Open Educational Resources have the potential to alleviate this challenge by providing faculty, students, researchers, practitioners, extension, and even farmers with a wide variety of free, relevant, localized, and up-to-date educational materials. These resources can be modified to a particular context and integrated into university curriculum, professional training materials and educational programs.

Purpose of the Guide This guide is meant to help individuals involved in the research, study, and practice of African agriculture to share the high quality teaching and learning resources they create. We hope to provide you with the information you need to effectively contribute to a growing participatory culture. When we work together as colleagues or classmates, we can strengthen agricultural education and advance meaningful community efforts on a local and global level.

Open Education

"...is the simple and powerful idea that the world's knowledge is a public good and that technology in general and the Worldwide Web in particular provide an extraordinary opportunity for everyone to share, use, and reuse knowledge."

- The William and Flora Hewlett Foundation

Open Educational Resources - A Community Approach to Education

Digital content can be seen as set of building blocks in a larger structure: small pieces come together to form a larger structure. When teachers, students, professionals, and organizations provide small contributions of their knowledge, we increase opportunity to work together to create additional resources and solutions that have relevance to immediate challenges or ideas.

The reality is, we all search for content to help deepen our understanding of a particular subject area or to create something to demonstrate our knowledge. We rely on others to share educational material so that we can more effectively create what we desire.

The goal is to encourage the sharing and subsequent use of the knowledge in academic, amateur, and professional spheres. Whether a faculty member posts a syllabus online, a home gardener records and uploads a video to YouTube, or a food scientist provides information pamphlets about microbial testing centers, we can create learning tools and educational resources to help improve learning, informal knowledge and professional practice.

A Simple Principle

> *"digitised materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning, and research. OER includes learning content, software tools to develop, use, and distribute content, and implementation resources such as open licences." - UNESCO*

The Open Community

What is so special about the OER community? It is made up of people who actively support the free exchange of knowledge. People who want to give others the chance to make use of what they create to create new content. People who say, "Take what I make, add to or change it, contextualize it, translate it. Let's work together."

Start Sharing

As a university faculty member, a student, or agricultural practitioners in non-profit or government organizations, use this guide to learn more about what you can share and where to share it.

Whether you know it or not, you have a lot to share. And we want to invite you to become part of a growing network of individuals who are generating and sharing quality educational content that can lead to new content and new forms of professional, academic, and social relationships.

It is our goal to encourage a wide range of individuals involved in agricultural education to generate and share educational resources. Whether you're an instructor, a student, a farmer, or

part of a non-profit organization we hope you will use this guide to learn more about what you can share and where you can share it.

Where to Start & What to Share We encourage you to start by taking a look at your educational portfolio. What material have you created that could be considered useful to others? Do you have course syllabi and reading lists you have created? What about research papers you have written for a particular course or a Master's thesis? Perhaps you have photos of a unique agricultural practice or a transcript of an interview with a local farmer.

As a University professor or instructor, you may have presentations and teaching plans that could be shared. Perhaps you are a student who volunteers with a community organization and has created materials on agricultural best practices. Whatever the context, it is likely you have created a number of resources that have potential value to others in the agricultural learning community and beyond.

Considerations in Sharing Materials - A Contextual Checklist

You have valuable knowledge and insights. Select an avenue of dissemination that will maximize the chance that the resource will be discovered and utilized by other audience.

1. Determine the Material Type – You have something to share.

A Short List of Materials to Consider Sharing:

- Teaching Cases
- Photos / Videos
- Recordings
- Software
- Instructional Modules
- Field Notes
- Blog Posts
- Multi-Media DVDs
- Quizzes and Exams
- Meeting Notes
- Presentation Slides
- Interview Transcripts
- Presentation Notes
- Study Guides
- Master's Theses
- Research Papers
- Pamphlets
- Websites
- Simulations
- Data Sets

Considerations:

No Contribution is Too Small

Discrete pieces of content – whether photos published alongside research, teaching or research materials used or created as a part of research, etc. - play an important part in helping build a corpus of diverse and high quality educational content.

Print Versus Electronic Format

Not all content need be shared in a digital form or via the Worldwide Web. Certainly making these resources available in an electronic format increases the potential of use and wide distribution, but a printed brochure or handbook that is distributed also has a distinct value and potential for impact. The important thing to ask is: what works for the immediate or desired audience or context?

2. Select a License - How open do you want to be?

Simply publishing what we create on the Worldwide Web or making it available in a print or digital format is only one part of the process of opening content. While the intent to share is there, there is a need to indicate the full intent to provide users with the freedom to reuse, remix, and redistribute the content for ongoing innovation and creativity.

To do so, many people choose to use a Creative Commons license. These alternative copyright licenses clearly indicate to others the rights the author has and the rights the user has. Basically, the creator retains her copyright to the material, but also provides others the right to make use of the material.

You may see licenses like ones below, which show others what they can do with the content. Learn more about Creative Commons licenses by going here and selecting one that works best for your context.

Ok for someone to use your material commercially?	Ok for someone to create new versions of your material?	Then, choose the following CC License	And, use the following CC License Symbol
		**Attribution**	
	Yes, and they must license the new work under a Share Alike License.	**Attribution - Share Alike**	
		**Attribution - No Derivatives**	
	Yes, and the new work must be non-commercial, but it can be under any non-commercial license.	**Attribution - Non-Commercial**	
	Yes, and they must license the new work under a Non-Commercial Share Alike license.	**Attribution - Non-Commercial - Share Alike**	
		**Attribution - Non-Commercial - No Derivatives**	

(Adapted from chart by OER Africa)

3. Provide a Resource Description – Help others find your resources by adding metadata.

Many software programs and applications have some form of 'metadata' function that enables you to add descriptors, tags, or other valuable information to the resource itself. For example, in Microsoft Word, Excel, and PowerPoint it is easy to add metadata to a file by visiting the 'properties' window. Some applications provide a limited range of fields for metadata, so it is always possible to include metadata can always be integrated into the document itself in a table or another format.

Metadata that is helpful to include:

- Author(s)
- Copyright Holder(s)
- Open License URL
- Title
- Language
- Date Created
- Keywords
- File Size
- Audience or Age Group
- Resource Description
- File Format

Considerations:
What is the curricular focus or subject matter of the resource? Does it relate to regulation, management and operation, food safety training / practice, agricultural best practice, Veterinary medicine, etc? Also, one incredible thing about sharing your material as OER is that the intended audience may or may not be who actually makes use of the resource. A photo could appear in a magazine or a website, a student could make use of a dataset to create an interesting mobile application. In the end, the content creator - you - receive credit for your contribution.

4. Choose an Avenue of Dissemination - Where will your resource have the most impact?

It is important to keep in mind that in many parts of Africa, the reliability and affordability of Internet connectivity remains one of the biggest barriers for educators and those seeking information and resources. As such, it is important to consider other avenues of dissemination that might have significant impact not only in your desired context, but also other communities and contexts.

Upload to Web, Upload to Repository, Social Media services / outlets, Data sharing sites, USB or CD/DVD, print on demand, physical print resource, presentation at conference / meeting, training or classroom, mobile, community forum, etc.

You're ready to share. Have you done the following?

Pre-Dissemination Checklist for OER

(This might be similar in design to the "Research Process Checklist" in the AgShare Toolkit)

Step 1. Determine the Copyright Holder

Are you the creator of the content / resource / material? Or, has the appropriate rights holder(s) been identified for the material and permission secured to publish the material? If YES, jump to Step 2. If NO, the rights holder must be identified before moving on.

- Each organization or institution may have a different policy around who holds the copyright to the work and content you create. Check with an administrator to determine the institution's policy and to ensure you and others can share. For more information on policy related questions, visit OER Africa's Policy & Review Development Toolkit (http://www.oerafrica.org/policy-development-review)

Step 2. Identify Embedded Content

Does the content / resource / material contain any embedded content (photos, charts, illustrations, etc.) that were not created by author of the principle content / material / resource?

- If NO, Skip to Step 3.
    - Many presentations contain images simply pulled from the Worldwide Web but are not openly licensed. While some exemptions exist for educational contexts (e.g. fair use), these images cannot legally be republished without the explicit permission of the individual or entity who holds the copyright to that image.
- If YES, have the copyright holders of this embedded content provided permission to republish the resource?
    - If not, permission to publish must be obtained from the creators of this content OR the embedded content must be substituted with openly licensed content OR recreated in a new and unique way before proceeding.

3. Select a Creative Commons License for the Material

Has an open license (e.g. Creative Commons license) been applied to the content / resource / material you desire to share? (for more help on Copyright and Licensing visit OER Africa's OER Copyright and Licensing Toolkit: (http://www.oerafrica.org/resource/oer-copyright-and-licensing-toolkit) If **YES**, proceed to Step 4.

- Has the selection of an open license been incorporated and made explicit in the material? Whether with an image or embedded metadata? (For guidance on

including or embedding licensing information use the OER Copyright and Licensing Toolkit.)

4. Include Metadata

Have the materials included tags and other metadata that will more easily help people categorize the resource in a database or other search based repository?

- While many repositories and databases where content can be share will allow for an author to include key metadata, including metadata into a document or file can be difficult without advanced technical knowledge. That said, it is possible to simply include a summary of some key metadata in an appendix or an attached text file.
- Some considerations for metadata to include might follow AIMS standards. (More information on AIMS Standards here: (http://aims.fao.org/advice-and-capacity-development/metadata-standards)

5. Ensure Editable File Formats

Has the content / resource / material been made available in an open and editable material file format? This will enable maximum flexibility for downstream use and reuse.

- For example, if a presentation has been made using Microsoft PowerPoint the original .PPT or .PPTX file should be shared to make it as easy as possible for others to download and edit. While a .pdf file may be accessible it is far more difficult for a user to extract and reuse pieces.

6. Determine the Avenue of Dissemination

In addition to web based repositories and content sharing sites, there are any number of non-Web 2.0 avenues that might be applicable for dissemination.

- Consider ways in which the resource might have a real local impact, whether sharing the resource on a USB drive, CD, DVD or even as a handout or brochure. Other venues might include a presentation of your work on a local TV station, radio program, in a community workshop, at an agricultural show, an in classroom presentation, or information pamphlets, etc. Each of these non-Web 2.0 avenues can all be equally as effective in helping to share knowledge, research, community practice, etc.

Where to Share (and Find) OER online.

Which avenues and platforms will most effectively increase the reach of your knowledge and resources?

General Presentations / Educational Content

- OER Commons: http://www.oercommons.org/oer
- MERLOT - http://www.merlot.org/
- TESSA - http://www.tessafrica.net/share
- Teachers Without Borders - http://teacherswithoutborders.org/

- Slideshare.net - http://www.slideshare.net/

Website for General Datasets
- Coherence in Information for Agriculture Research for Development (CIARD) RING: http://www.ciard.net/resources/ciard-ring
- Global Open Data for Agriculture and Nutrition (GODAN): http://godan.info/

Repositories Focused on Agriculture
- Consultative Group on International Agricultural Research (CGIAR): http://www.cgiar.org/
- OER Africa AgShare Repository:
- RUFORUM Open Educational Resources:
- Food and Agriculture Organization of the United Nations: http://www.fao.org/africa/en/
- Global Agricultural Research Archive: http://www.cabi.org/gara
- FoodNet: http://www.foodnet.cgiar.org/

Standards
- Agricultural Information Management Standards (AIMS): http://aims.fao.org/

Networks
- Green Learning Network: http://www.greenlearningnetwork.eu/
- Association of African Agricultural Professionals in the Diaspora, Inc: http://www.aaapd-africa.org/
- Forum for Agricultural Research in Africa (FARA): http://www.fara-africa.org/

Tools for Dissemination of OER
- South African Institute for distance Education (SAIDE): http://www.saide.org.za/design-guide
- WikiEducator: http://wikieducator.org/Main_Page

Open Access Academic Journals
- Access to Global Online Research in Agriculture (AGORA): http://www.aginternetwork.org/en/
- African Journal of Food, Agriculture, Nutrition and Development - http://www.ajfand.net/
- African Journal of Agricultural Research - http://www.academicjournals.org/journal/AJAR
- Journal of Agricultural Science - http://www.ccsenet.org/journal/index.php/jas
- Journal of Tropical Agriculture - http://www.jtropag.in/index.php/ojs
- World Journal of Agricultural Science - http://www.idosi.org/wjas/online.htm
- AgEcon - http://ageconsearch.umn.edu/
- list: http://www.aaapd-africa.org/page/Open_Source_Journals

Organizational Support / Funding Ties
- http://agra-alliance.org/

Websites for Photos & Multimedia
- Flickr.com -
- Youtube.com

- Wikimedia Commons: http://commons.wikimedia.org/wiki/Main_Page

[Note: A scaled down version of this could also be generated. Basically, a one page guide / diagram that would simply showcase potential avenues of dissemination for particular audiences. We could also have a column for “important considerations” to keep in mind at each step.]

Example:

Resource / Material Type	Where to Share	User Community	Considerations
Academic Research Papers	Journal: African Journal of Agricultural Research http://www.academicjournals.org/journal/AJAR	Academic, NGO, Government, Business.	Are there discrete pieces of your resource that could be shared? For example images, figures, presentations, or other notes?
	Repository: AgEcon Search http://ageconsearch.umn.edu/sub-instructions.jsp		

References.

1. Geith, Christine and Karen Vignare, AgShare Open Knowledge: Improving Rural Communities Through University Student Action Research, *Journal of Asynchronous Learning Networks*, Volume 17: Issue 2

Appendix

Here you will find resources downloadable tools like templates and planning documents to assist with the development of your project.

AgShare Research Project:
Quality Standards Measurement & Evaluation

Use this template to describe the quality standards of a research project and the measurements you can use to evaluate them. The list of quality standards should be determined by both the faculty and student(s) involved in the projects. The faculty member should describe the evaluation criteria (below average, average, above average). This document can be completed at the beginning of the project and used at the end as a way to assess the project.

Quality Standards for Research Project	Below Average *(meets some quality standards)*	Average *(meets quality standards)*	Above Average *(exceeds quality standards)*
Example: *Sufficient infrastructure is available for collecting data*	*A low number of resources were available for data collection resulting in inaccurate results*	*An acceptable amount of resources were available for data collection resulting in valid results*	*An acceptable amount of resources were available for the study resulting in valid results – due to the variety of resources available there are additional research possibilities*

AgShare Project:
Research Process Checklist

This template can be used in the planning stages of a research project. The checklist includes suggested steps for developing a research project and specific criteria for each step. Faculty members should add and/or delete items on this check list based on specific research goals and share with students.

	Complete	Not Complete	N/A
Identify the research problem/question			
• Relates to farmers at a local level			
• Has potential to have a positive effect on the local community			
Review the literature			
• The student has a strong understanding of the background of the problem/question			
• The student is aware of similar studies and their results			
Clarify the problem/purpose of study			
• Based on lit review the problem/purpose of the study is refined			
• Student has received adequate feedback from faculty on the research problem/question			
Define the population			
• The characteristics of the population are identified			
• The scope of the population is identified			
Develop the data collection plan			
• Identify most appropriate method for collecting the data			
• Create timeline for data collection			
• Choose method for analyzing data			
Collect Data			
• Create data collection instruments			
• Collect data from identified population			
Analyze the Data			
• Conduct quantitative and/or qualitative analysis			
• Create reports based on analysis			
• Disseminate research findings			

Source: Fraenkel, J.R. How to Design and Evaluate Research in Education. New York: McGraw Hill, 2003.

Graduate Student Innovation/Translational Scholars Table Exercise

1. Briefly describe a research project in agriculture or a closely related field (i.e. health, environment) for which information would be useful to: **(a)** community stakeholders and/or **(b)** teachers in the form of written or video cases.

2. Imagine a graduate student as part of the research team who has special training to take on a role on the team where they create this information. What would this graduate student need to know and how would they need to behave to effectively perform this role on the research team? For example, they may need new media skills or they may need to understand the research methods of the team.

A graduate student:	**To write a case example**	**To video a case example**	**To write instructions or informational materials for community stakeholders**	**To blog about the project**	**To create _____ (fill in the blank)**
What they need to know or be able to do					
What professional personality traits do they need to exhibit to be a positive contribution to the research team?					

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   One Health, New Communication Technology, and Human Behavior

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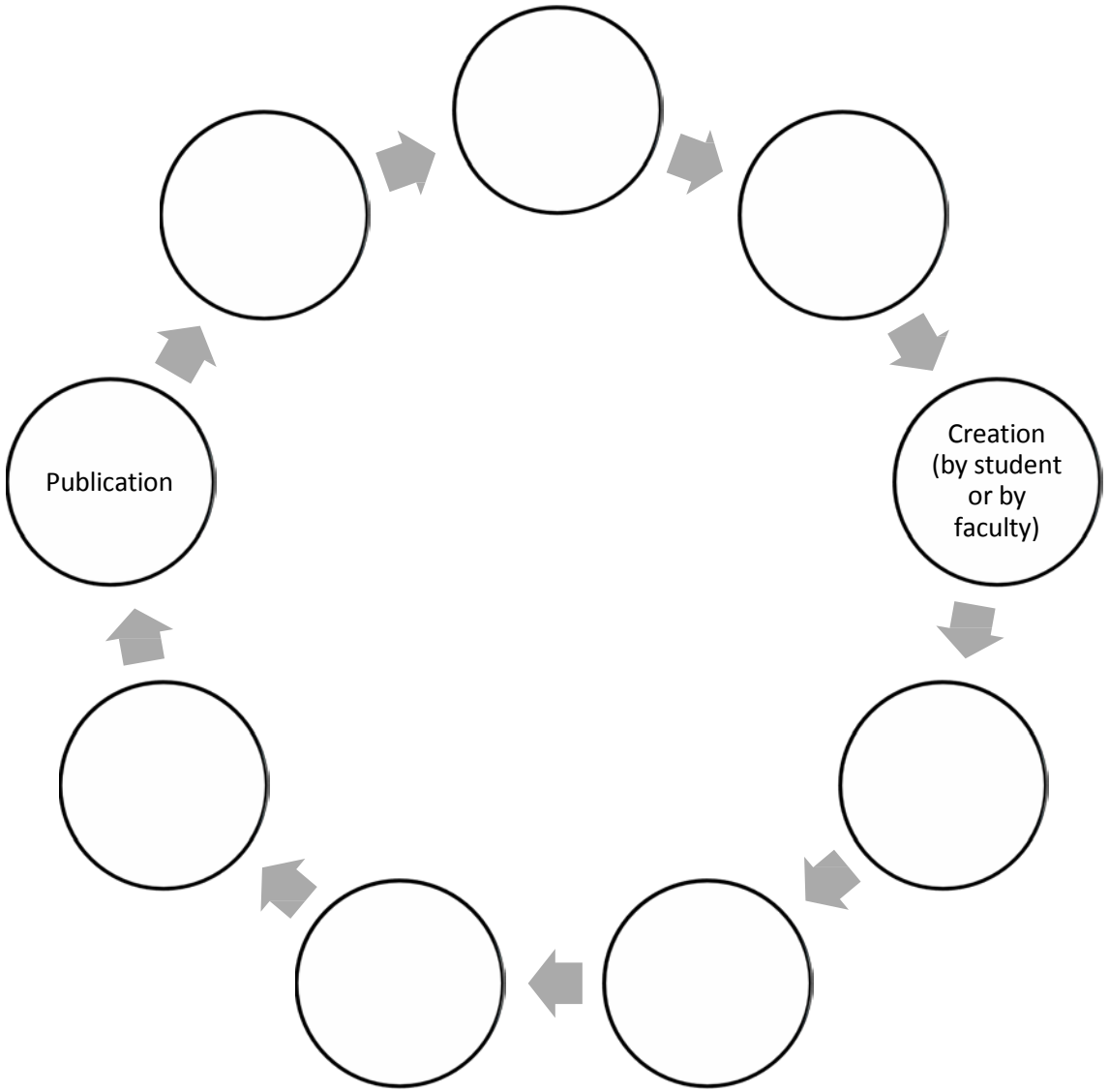
A graduate student:	**To write a case example**	**To video a case example**	**To write instructions or informational materials for community stakeholders**	**To blog about the project**	**To create _____ (fill in the blank)**
What they need to know or be able to do	-Ability to read scientific research (both natural and social) -Basic epidemiology course, perhaps basic nat sci courses -Ability to conduct literature searches -Interpersonal skills to connect with investigators.	-Digital media proficiency including editing, -Basic videography skills, -Journalism/story-telling skills	-Knowledge of audience-centered communication intervention design and access to data to drive this -Ability to read and translate scientific research (science writing) -Data visualization ability/design	-Basic proficiency in social media -Ability to read and translate scientific research (science writing) -Story-telling -Visualization ability	
What professional personality traits do they need to exhibit to be a positive contribution to the research team?	-Creativity -Engagement -Curiosity -Tenacity -Australian shepherd -like herding skills	-Creativity -Engagement -Curiosity -Tenacity	-Creativity -Engagement -Curiosity -Tenacity -Strong Interpersonal Skills -Self-Motivated	-Creativity -Engagement -Curiosity -Tenacity -Strong Interpersonal Skills -Self-Motivated	

Quality Assurance Workflow: Imagine a new multiple-media open publication for open agriculture knowledge. Authors and users are university students and faculty. Published materials include research-based video and text cases, data sets, teaching resources and extension materials. Imagine you are designing the publication to assure rigorous (1) scientific, (2) technical and (3) production quality for all published materials. **What does the workflow look like?** The diagram below is just a starting point.



AgShare Research Project Review: Student/Faculty/Institution/Community Perspectives

Use this template to assist in documenting the review process by research students, faculty, institutions, and members of the community. The student should use the first section as a self-evaluation of their research. The rest of the form can be used as a template to talk with faculty, members of the institution, and representatives of the community in order to receive feedback on the outputs of their research. Each section has blank lines so additional questions can be added. The results can be used to improve research outputs and help define future research opportunities.

STUDENT PERSPECTIVE	
	Student Comments
Intended Outcomes: Do the results of the research project match the intended outcomes of the project? Are there additional outcomes that exceeded the intended outcomes?	
Explanation of Research: Do the outputs tell the story of the research project? Are there any missing elements including challenges or stories of success?	
OER Requirements: Are OER requirements met for publishing as an open resource (licensing, no 3rd party content)?	
Selection of Technology Tools: Have the most effective technology tools been selected in order to most effectively tell the story of the research project (web site, video, manual, audio clips)?	

FACULTY PERSPECTIVE	
	Faculty Comments
Peer Review: Have other faculty members reviewed the outputs?	
Dissemination: Have locations been selected for posting the research results and outputs?	
Continuous Improvement: Have the strengths and weaknesses of the materials been analyzed for improvement? Has this information been given to the student?	
Gap Analysis: Has the research been reviewed in order to find gaps in the research process?	

INSTITUTIONAL PERSPECTIVE	
	Institution/Department Comments
Strategic Thinking: How does the research align with the strategic plan of the institutional and/or department?	
Discoverability: How can materials produced from the research integrate into teaching, as well as other research projects? How do you make the results visible to other faculty?	
Reputation: How have results of the research influenced the perception of the institution?	

COMMUNITY PERSPECTIVE	
	Community Comments
Improvement: Can community members use the research outputs within their livelihoods to improve their practices?	
Impact: How has the research influenced the community over a segment of time? Have community members changed their way of thinking or perspective?	
Analytics: Have community members accessed the research outputs?	
Evaluation: Have community members had the opportunity to give feedback on the research outputs?	