Report of the discussions on developing a research agenda for Open Educational Resources

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APPENDIX 4: Conversations map

The conversations map represents the discussions outlined in Appendix 3 (see main report document, p.18) in schematic form, allowing users to see the links between different threads. The map page headings correspond to the section headings in Appendix 3.

The conversations map may also be viewed as a mindmap¹ using Freemind².

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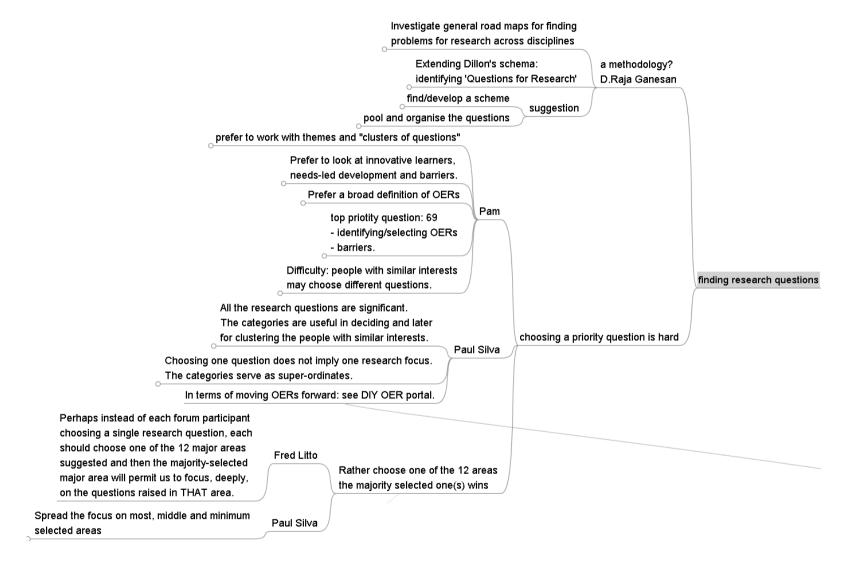
¹ Available on request from Kim Tucker (<u>ktucker@csir.co.za</u>).

^{2 &}lt;a href="http://freemind.sourceforge.net">http://freemind.sourceforge.net

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ALTERNATIVE PROCESSES

1.1 Finding and prioritising research questions



1.2 The IMS experience: standards development processes

Fred Beshears et al



- 1. IMS makes their specifications open to the public on their public website: http://imsglobal.org/
- 2. They also have a members only website, which contains discussion boards, draft specs, etc.
 - Organizations have to pay to become a member.
 Smaller ones pay less that bigger ones (see details on the IMS public site).
 - 4. The revenues from membership dues go towards staff salaries, travel expenses, etc.
- 5. Most of the work of developing specs goes on online. However, IMS does organize quarterly face-to-face membership meetings. Project teams also organize F2F meetings as well. IMS members pay to send their representatives to these F2F meetings, so that adds to the cost of participation.
- 6. IMS staff facilitate the development of specs (and in some cases they do a good deal of the heavy lifting). However, technical experts from member organizations also do a good deal of heavy lifting as well.
- 7. As for governance, there's a board of directors that makes high-level policy decisions. They also hire/fire the CEO. Then, there's a "technical board" that does all the heavy lifting of spec development. Also, the technical board votes on charters and draft specs.

Now, I'm not suggesting that IIEP adopt this organizational structure, or their practice of collecting dues to hire staff. However, I'm not sure how IIEP is currently financed, but if the IIEP doesn't have the staff to do the "heavy lifting" when it comes to generating research reports etc., then we should take that into consideration when we evaluate the IMS policies and procedures material.

In any event, I'll determine if we can simply link to the IMS policies and procedures documents (i.e. if they're on the public site). If there are relevant documents on the private site, then I'll check with the IMS CEO to see if they can be made available to IIEP. If it comes to this, I'm fairly sure the answer will be "yes, happy to oblige."

IMS policies and procedures

Thanks for posting IMS summary and docs on the wiki :-)

* What should the scope of the research agenda be?

* What should the results of any research efforts look like?

* How can the group ensure that any eventual product represented the consensus opinion of "all" community members?

To leverage the experience of the IMS, and focus our OER research agenda discussion, ask these questions:

LT: IEEE/LTSC, ISO/SC36/ADL

See alternative approaches in the FLOSS and open standards world.

Alternative approaches: each with their own policies and procedures.

May be too formal at this stage (until the impact grows)

inquiry and channelled discovery
[Mario Pillay]

Pertinent questions and alternative approaches

Processes in FLOSS and Open Standards development

For general processes, covering OER development, 'managing' this community, research agenda development, etc. we might gain by looking at some other perspectives - learning from various FLOSS development and open standards processes (some links below for anyone interested).

Personally, I prefer the approach alluded to in some of the postings: on an on-going basis make it easy for OER researchers to share results and insights, and for practitioners to share experiences and gain access to relevant knowledge - e.g via social software, search, the DIY OER portal, etc..

Facilitate and catalyse community self-organisation around a shared vision: (e.g.) enhancing OER practice around the world via sharing ... and encourage participants to go forth and collaboratively address the priorities while applying the learning in situ and embracing innovations as they become accessible. Trust the community's ability to manage quality and direction.

But there is room for multiple approaches :-).

FLOSS Development Community Processes and examples:
[Apache and Mozilla]

Open Standards Processes - though the IMS approach seems preferable in this context) [OASIS-OPEN, WWWC, OpenGeoSpatial, etc.

Possibly more "agile" thinking

- not standards-orientated
- "just do it" as a community.

and maybe this will interest some people - (order on the edge of chaos): http://www.chaordic.org/

intro

Alternatively, look at processes in FLOSS and open standards development. [Kim]

Thank you for your exploration of this. As to "heavy lifting" at IIEP, we have support from The Hewlett Foundation for the awareness and community building exercise we are all involved in here. IIEP gives support in kind and the work is leveraged from several ther activities. But let us see how the IMS model might suit the group.

Susan

See the Wiki page on this topic

I agree - the IMS process has a good self-organising feel to it. From Fred's description my impression is that it is driven by ideas, activity, collaboration and a consensus/peer-review approach to decision making. If OER research adopts that style it could enable a dynamic, bottom-up, "distributed", collaborative approach - which is an "ICT-appropriate" way to go about things.

Pam

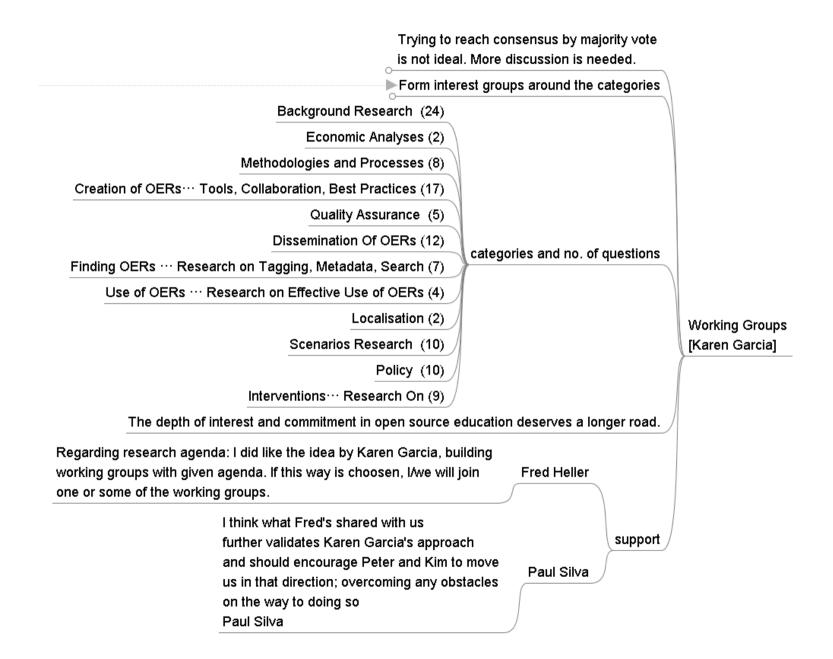
Commentaries

It occurs to me that Fred's description in many ways mirrors the "meritocracy" approach to FOSS development adopted by Apache. The apparent similarities struck me as interesting given that the OER discussion has included comparisons between FOSS development and OER development.

I think that there are important lessons to be learned fron the IMS specifications development experience, certaintly from the perspective of a group of people working towards the resolution of a problem for the common good of all involved - Not to mention the obvious that is would be nice to have easy ways to package OERs using de facto specifications <smile>.

Wayne

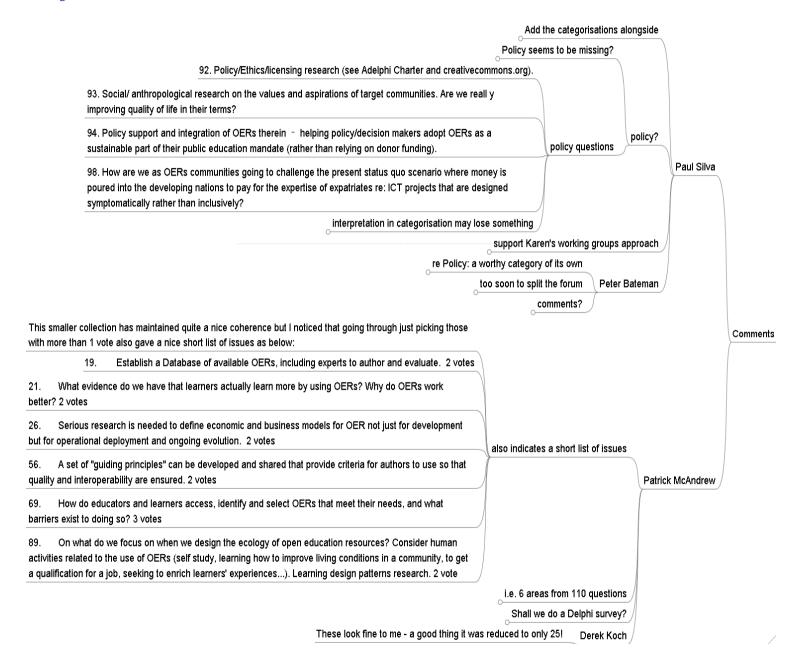
1.3 Working interest groups



1.4 Reduced agenda

Nabil Sabry

	A.1. Creating its own OER			
A.2. Social software phenomenon	, Collaborative development			
A.3. Quality	assurance in OER creation,			
A.4. Iterative processes for OER creation, re-creati	ion of OERs via localization,	A: Issu	es regarding the way OERs are Created	
A.5. Contextualization and tra	anslation of existing content,	S		
A.6. Interoperability and compliance to standa	ards in the creation of OERs	1		
A.7. Human reso	ource capacity development	_		
B.1. Governance and management scher	mes for OER organization			
B.2.	IPR and licensing issues,	B: lecues	regarding the way OERs are Organized	reduced agenda
B.3. OER storage/portal mechanisms, taggir	ng and metadata systems	D. ISSUES	regarding the way OLIKS are Organized	Teduced agenda
B.4. Classification me	ethodology, searchability,			
C.2. Delivery methods particularly for low ba	C.1. Awareness andwidth communities	Issues reg	garding the way OERs are Disseminated	
D.1. Mechanism	s for using/re-using content,	- Di leei	ues regarding the way OERs are Utilized	
D.2. Sustainability/business modeli	ng for OERs use and re-use	D. 1550	des regarding the way OERs are Offized	
E.1. What worked, what did not we	ork, how do we improve the p	rocess		
E.2. Localization qu	estions, anthropological persp	pective	E: Issues relating to OER Interventions	
E.3. People and roles, collaboration, best practices	, learning patterns and scena	ırios,		



1.5 Voting and the wiki

We have now compiled a list of the research questions that were identified as priority. We have maintained the original numbering so that it is clear where the gaps are from the original list of 110 questions.

Not many of you responded, only about x per cent. And not surprisingly, given the large number of questions that were put forward over the course of the discussion in the first weeks, there was little consensus. Most questions were put forward by one person. For those questions that were identified by more than one person, we have noted the frequency in bold after the question.

Please look over what has been selected…and what has been lost. And consider what might be added - or deleted given the discussion of the last week.

Just as the number of research questions you identified during the discussion over the last weeks made it difficult to come to a consensus on priority questions, the breadth of the discussion makes it a challenge to summarize. The facilitators of the session, Kim and Peter are working hard on this at the moment, and as soon as the report is ready, we will circulate it to all of you and post it on the web site as well.

In the meantime, it is interesting to note that the wiki page http://oerwiki.iiep-unesco.org has been consulted but little has been added to it.

The addition of the community member list at

http://oerwiki.iiep-unesco.org/index.php?title=Community_member_list was an excellent addition and a number of you have put information on it. Let me encourage the rest of you to do so. Since our group was so large, we did not propose a period of introductions at the beginning of our work together. The wiki allows us to do so now.

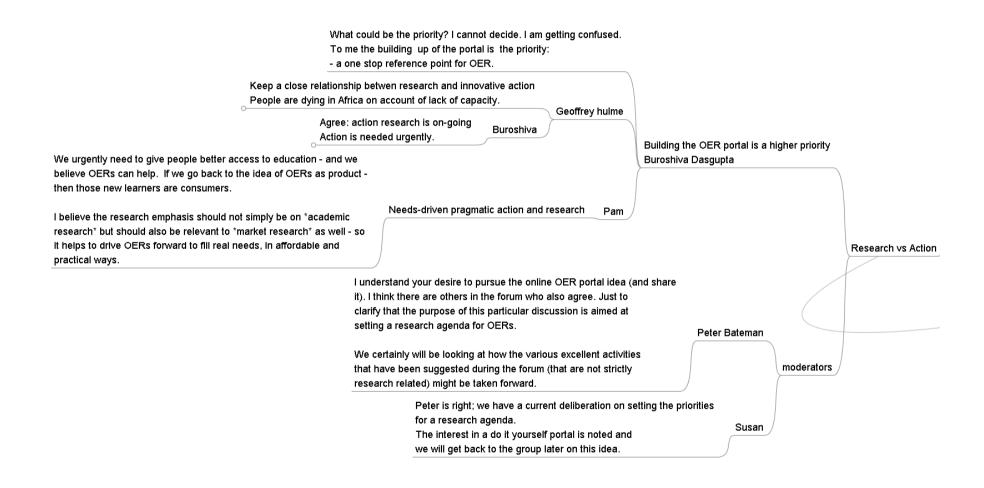
votina

wiki

1.6 Research vs. action

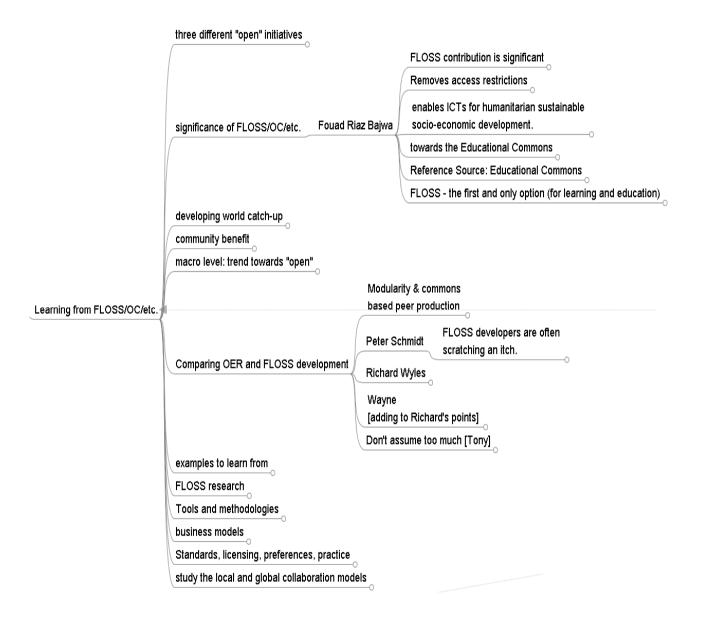
Buroshiva, Geoff, Pam et al

This led to the DIY Portal idea and discussion which is covered later.



2. WHERE DO WE FOCUS?

2.1 Learning from Open Initiatives



2.2 Narrow focused questions

OER questions first: narrow the OER scope. Later: FLOSS, Open Access, self-organisation, etc. and self organisation of this community [kt :-] begin by establishing a solid knowledge base for OERs and then look for synergies between the various "open" initiatives? PB but not too narrow wrt imagining solutions; consider the environment and support [Patrick McAndrew] (and the environment in which it operates) before drawing too heavily from the FLOSS experience. PB I suspect that there will in fact be a more 'synergistic relationship' than a direct correlation between the two and as such, if we begin to While an investigation (and perhaps further comparison) of the FLOSS risk [PB] draw direct relationships between the processes too early, we risk movement with the OER movement is perhaps inevitable, I would like to establishing a false set of parameters in which the OER movement suggest that we first look a little closer at the OER movement might be expected to thrive. Peter Bateman narrow focussed questions As I asked in an earlier post, would you agree that [DW] it might be better for us to begin by establishing establish a solid knowledge base a solid knowledge base for OERs and then perhaps for OERs first? looking for synergies between the various "open" initiatives? OER First? [PB] I agree with Paul (below) that there are several possible avenues we could follow with regard to various "open" initiatives. In this forum we are seeking to narrow this (somewhat overwhelming) array of possibilities into a more focused view for research initiatives in OERs. Hence the clustering. reiterating Since there is still some work to be done on understanding fully the nature of the OER movement, would you agree that it might be better for us to begin by establishing a solid knowledge base for OERs and then perhaps looking for synergies between the various "open" initiatives? In this way we can perhaps better undertake the latter from an informed perspective.

Doing more of the same, entrenching the past etc.

OERs are not the dominant model of the past and we may lose sight of the opportunities for the future.

The future is going to be different from the past.

Be careful of placing too much emphasis on research on the past.

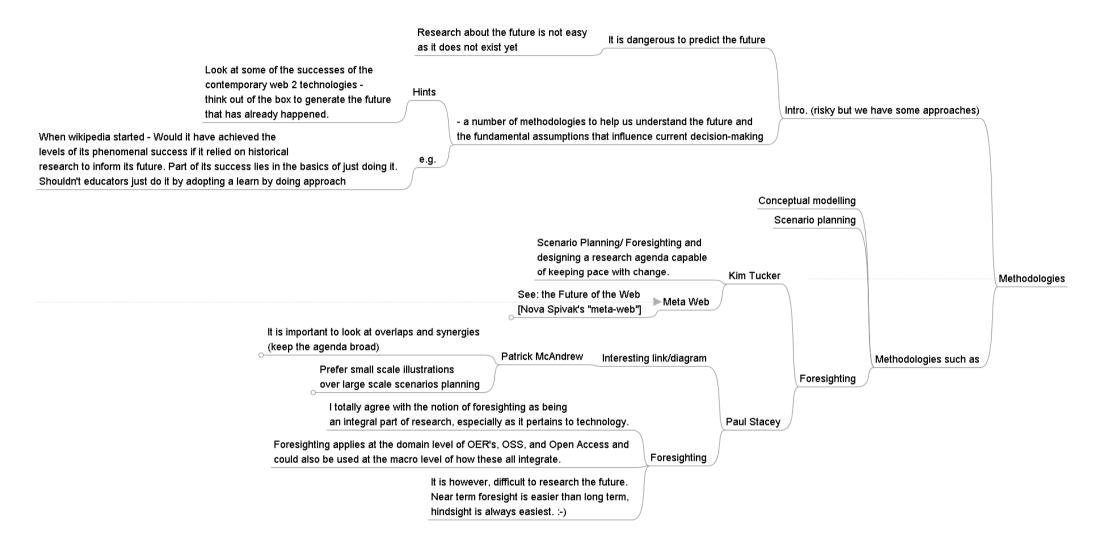
Risk of focussing on the past [WM]

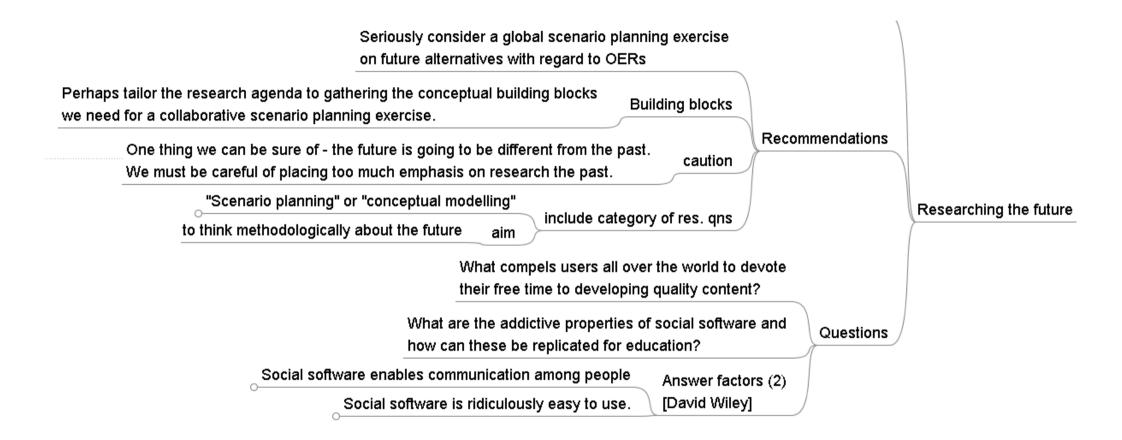
lessons-learned vs future scenarios

Researching the future (WM)

Action/ Grounded Research etc.

Researching the future: methodologies





2.4 Evidently we should focus on...

Evidently, widening the basis of OER producers worldwide is a crucial issue Creating OERs made easy Evidently, many persons have addressed this issue in exchanged e-mails (DIY issue) Results in the short list (point 35): 1 vote (better than nothing!) Evidently, collaborative development is a real revolution in the cultural production of mankind Evidently, existing tools to enable that (wiki or others) are not quite adapted for OER Collaborative development tools and methodologies Evidently, this issue has occupied many dozen of e-mails Results in the short list (point 41): 0 vote (interesting!) Evidently, if we were successful in implementing the first 2 points, then documents will be produced in MANY languages Evidently, we should focus on: Evidently, we will need massive translations in ALL DIRECTIONS [Nabil Sabry] Context-aware automatic translators Evidently, actual automatic translators are far from being satisfactory Results in the short list: The point was not even addressed in the long list! Evidently, if a lot of resources were produced (let us cross our fingers!) then issues like: Standardization, Searchability & Quality Standardisation-searchability-quality Will become of paramount importance I will address these points in a next e-mail because I hate long emails! Fortunately these issues appear in many places in the short list.

2.5 Action Research etc.

Study relevant situations where ICTs are being introduced, add OERs if necessary, and study the practices [KT]

A lot of successful innovation has come from knowledgeable people

using their judgment on what is worth testing

endorse "learning by doing" Geoff Hulme resp to Wayne

Action research goes in and out of fashion but there must surely be scope for it here

Personally, I have a preference for what is called design, development or constructive research.

Such research is consists of long-term collaboration between researchers and practitioners focused on broad-based, complex problems critical to education (do OERs fit?).

Interest and work around this type of research is found in a range of disciplines including management, information systems and education.

Design, development or constructive research [David Jones]

Action/ Grounded Research etc.

"bottom up" ways that innovative learners are managing to enhance their learning with OERs - and what stands in the way. (Pam)

unstructured informal learning - individual and through communities of interest. (Pam)

How do educators and learners access, identify and select OERs that meet their needs, and what barriers exist to doing so?" (was q. 69) (Pam)

innovation and needs-led development

see access-reuse-I10n-relevance (on identifying the needs)

The needs range from libraries to one-on-one discussions

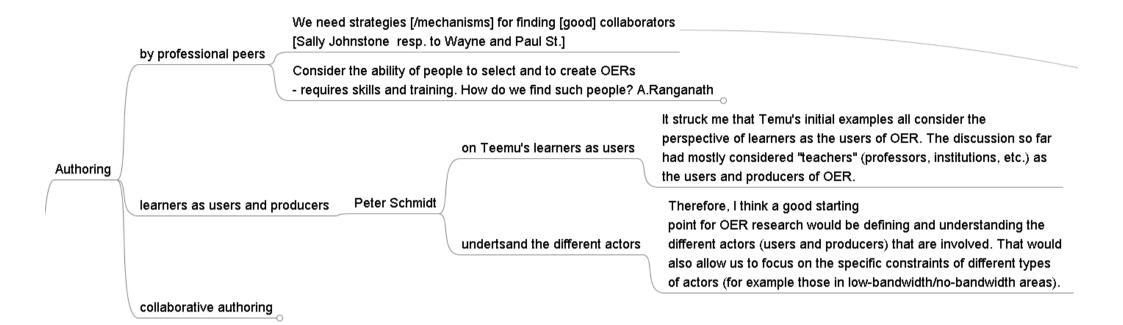
A guide to selecting software and OERs would be useful (we have some info. to share)

Douglass Capogrossi

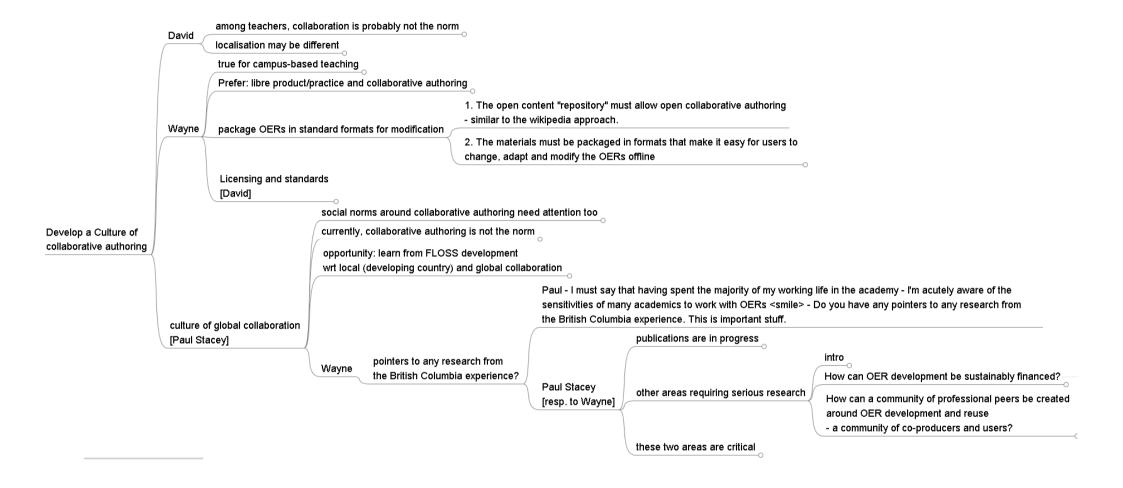
learner needs

3. CREATION

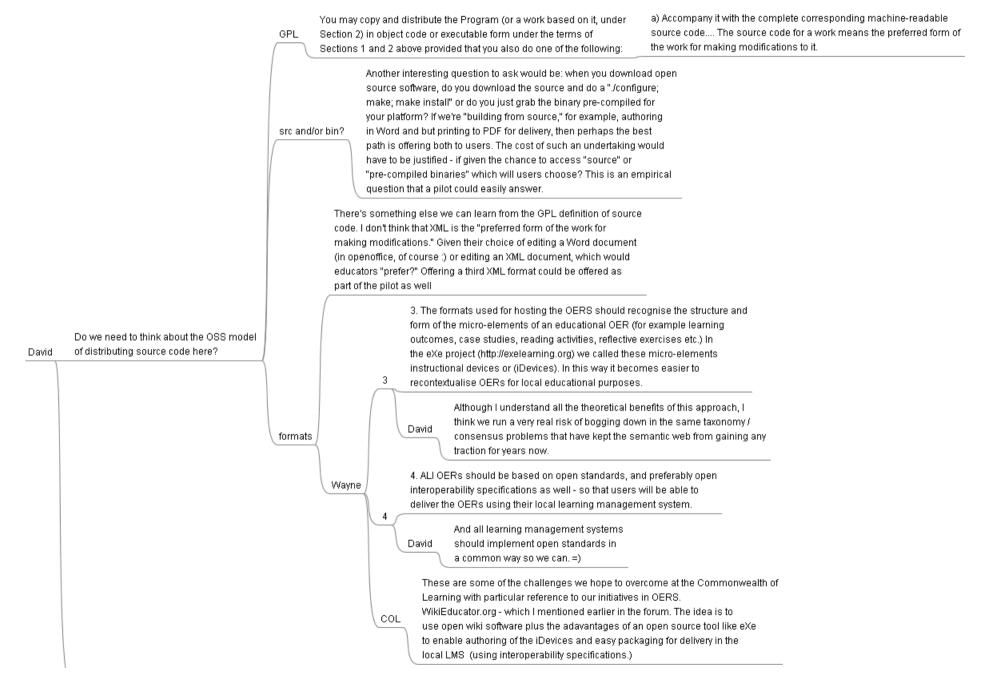
3.1 Creation by professional peers



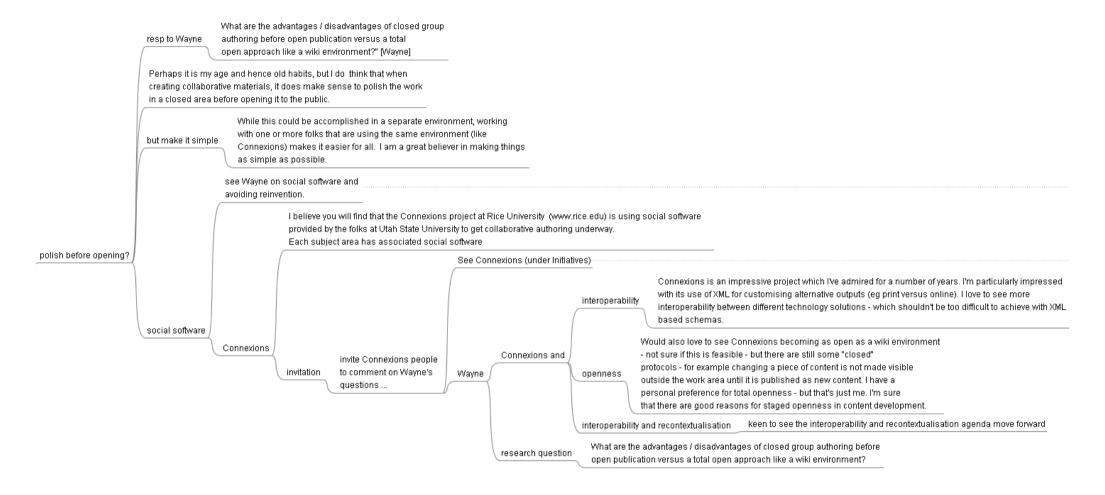
3.2 Towards a culture of collaborative OER creation



Licensing, formats, standards

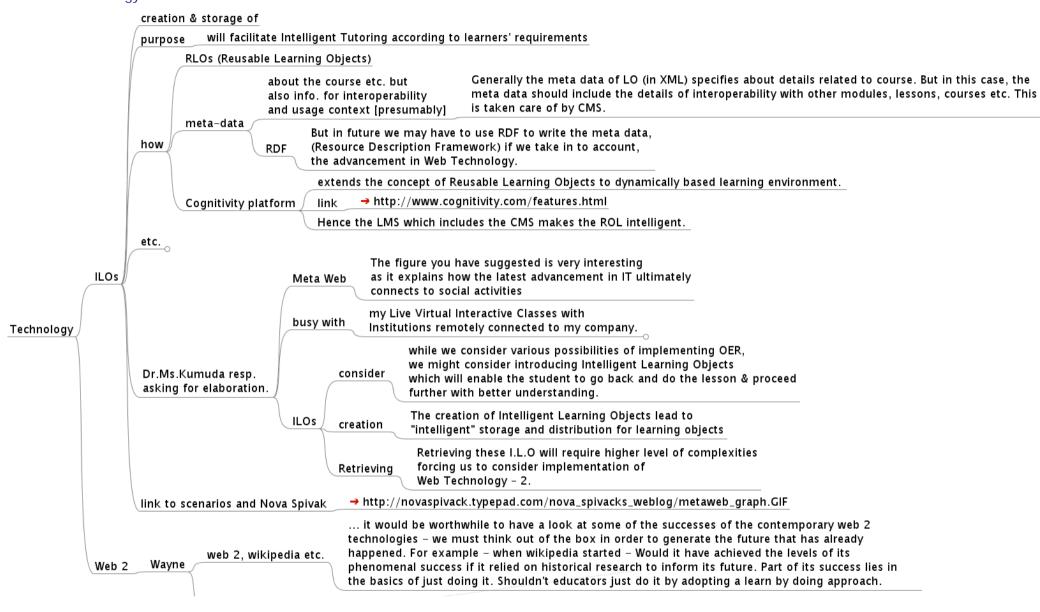


Polish before releasing for co-creation?



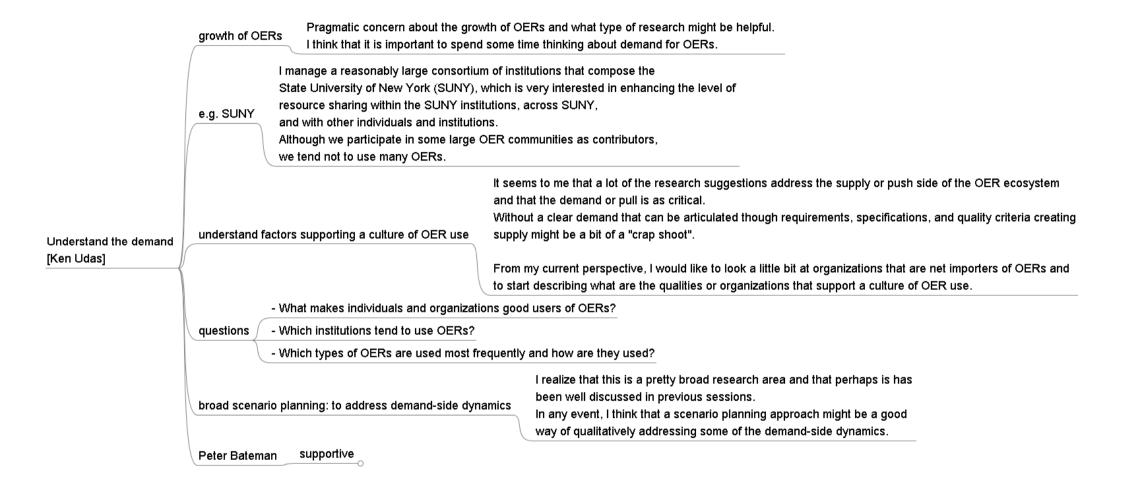
See also Wayne's comments later on understanding the social QA processes behind (for example) Wikipedia (a powerful phenomenon).

3.3 Technology for OER creation



4. DISSEMINATION

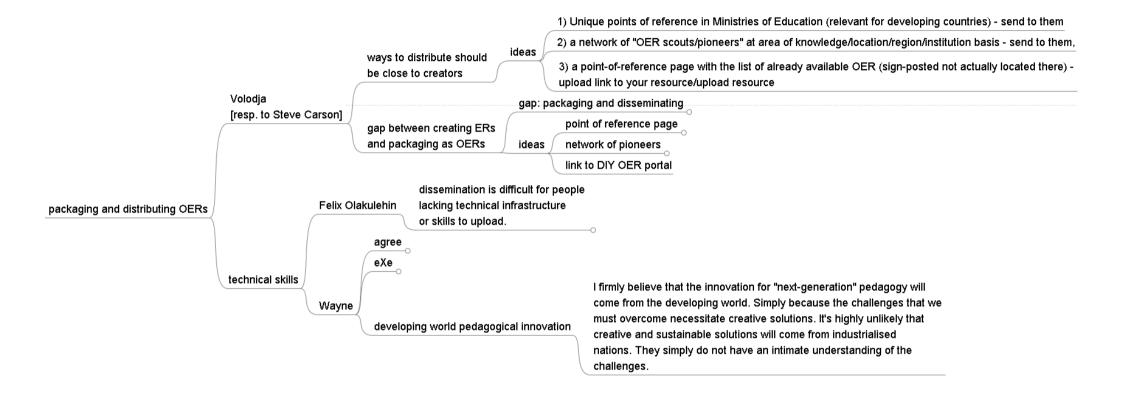
4.1 Understanding the demand



4.2 Encouraging use of OER

it is important to enlist the support of a maximum number of individuals and at all levels of operation in this venture, ranging from education specialists, educational technology specialists and very crucially - policy-makers. advocacy advocacy will generate important research (Sushita Gokool-Ramdoo) as well as capacity building initiatives that should contribute towards making headway find ways and means to convince people of the need to commit resources towards OER encouraging use of OERs a simple library resource model that assumes that if the Jawbone we build it and if we tell them about it (jawbone them) then they will come. an administrative fiat model where we tell faculty they have to use open content as a substitute for commercial textbooks. Fred Beshears the Stick This model may be used where students simply cannot afford commercial textbooks a financial incentives model that would the Carrot involve student fees and faculty stipends

4.3 Packaging and distribution

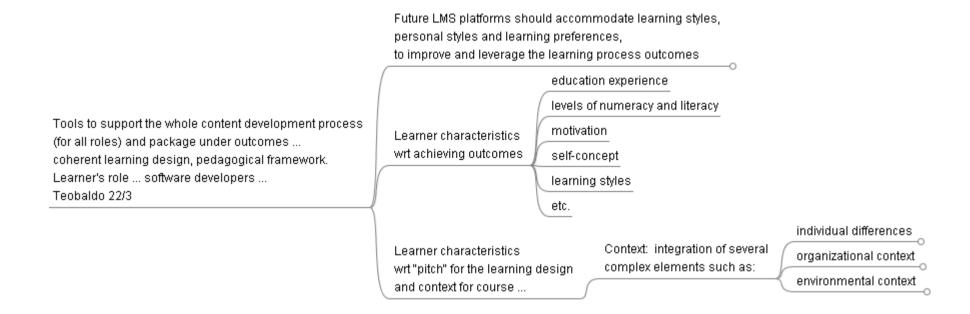


4.4 Learner support

The most important question is to strengthen the Learner Support Systems in Open and Distance Learning (ODL). We must address this issue more seriously and OER user support be they educators or learners (Dhaneswar). This issue is discussed further elsewhere.

5. QUALITY

5.1 Tools to support a quality OER development process



On a technical level, it was suggested we consider the relevance of tools like CVS (code versioning system), and the type of "edit-review-publish" workflow found in content management systems to manage quality.

5.2 Standards and relevance

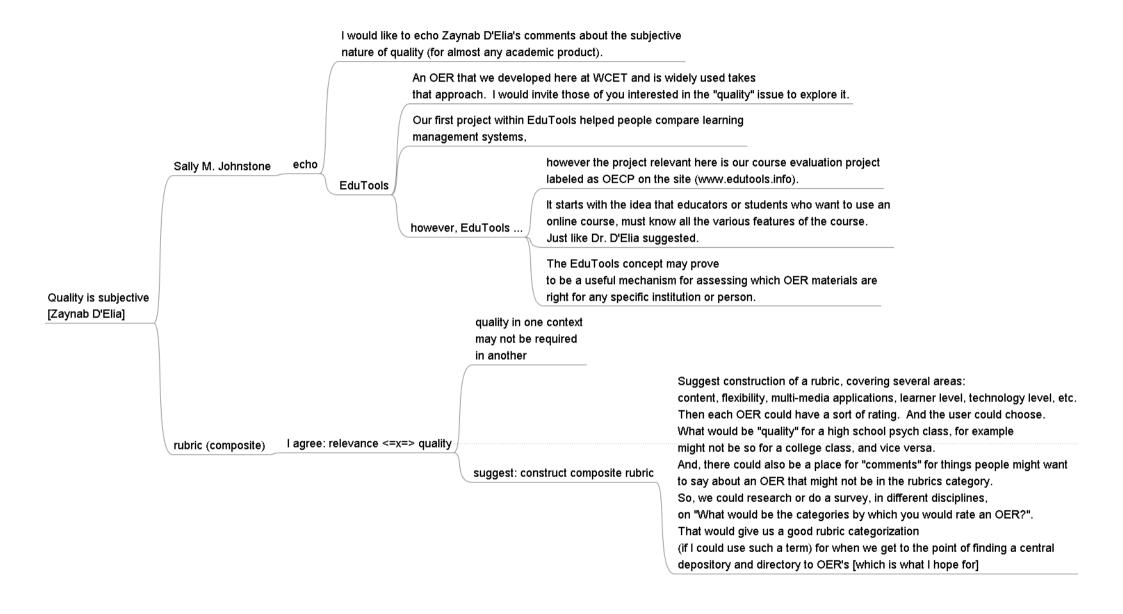
Apart from the challenges involved in having lay faculty writing Open content materials to widen access, I have always been concernced about the issues of quality and relevance of OERs developed by so called qualified faculty members.

We must be conscious of the fact that even in the 'closed' resource system, not all relevant materials are of the desirable quality and not all materials that of good quality are relevant to the needs of the education system.

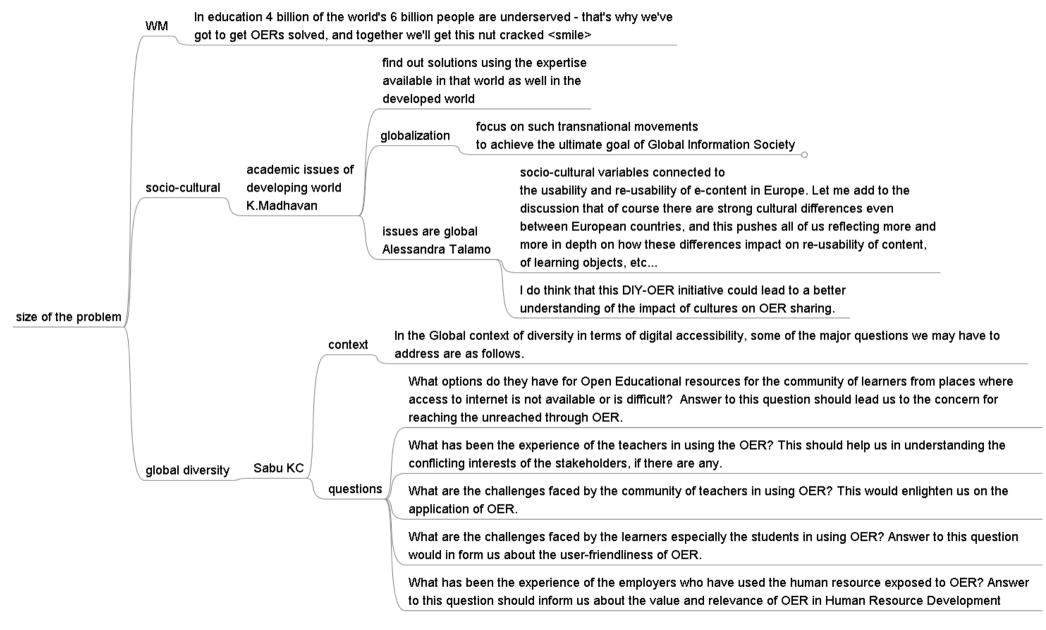
In this knowledge milieu where we train learners to think locally and act globally, the twin challenges of quality and relevance must be of priority concern in the development of OERs.

How do we determine Quality Assurance Criteria and develop minimum academic standards for OER initiatives ?

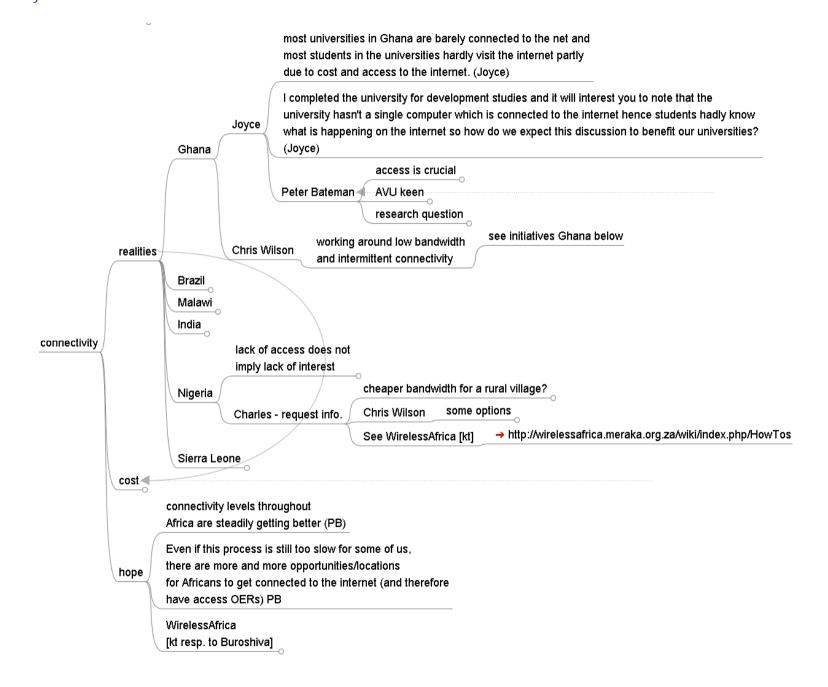
5.3 Quality is subjective



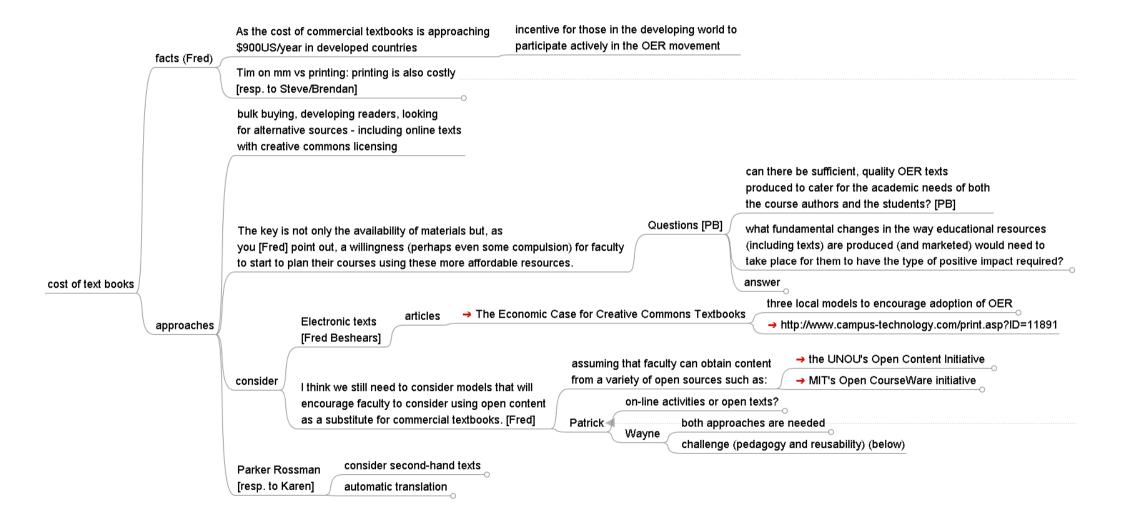
6. ACCESS Scale of the problem



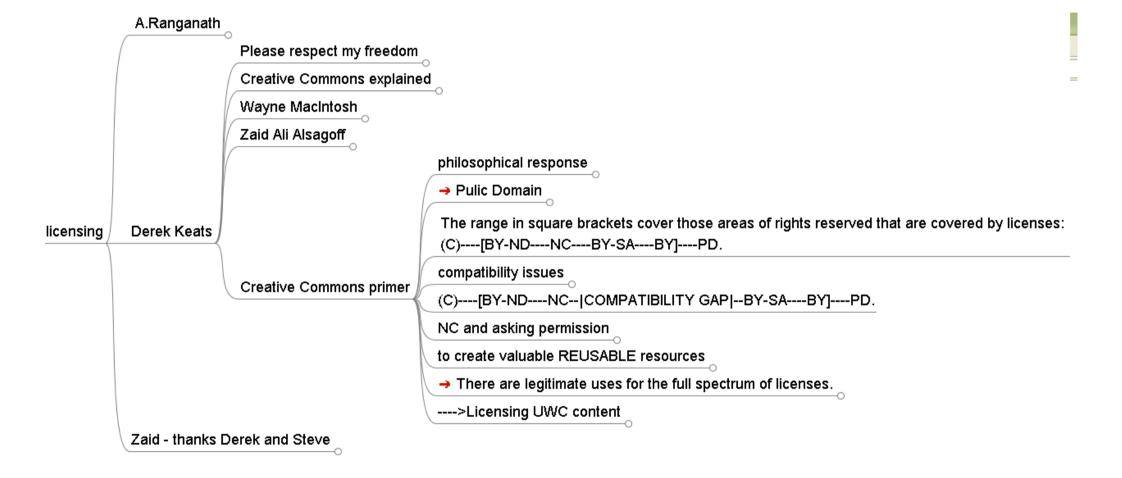
6.1 Connectivity



6.2 Cost of text books

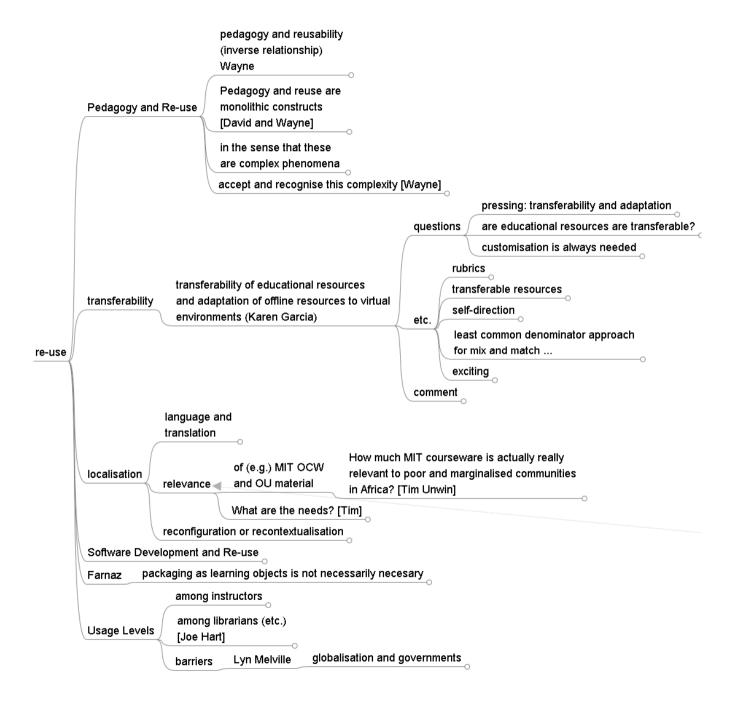


6.2 Licensing

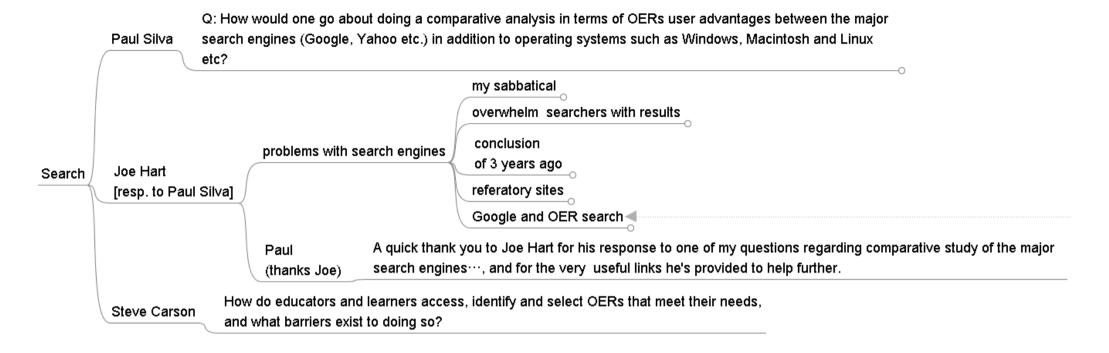


I am posting this response to those two points because the response to both is related. philosophical response The discussion below is philosophical. not legal as I am not a lawver. I included Pulic Domain in this continuum because, while the concept is not valid in all jurisdictions, it does represent the only expression of "no rights reserved". It is not a license, but works can be voluntarily placed in the Public Domain and given a Creative Commons deed: see http://creativecommons.org/licenses/publicdomain/. In fact, this continuum represents a spectrum → Pulic Domain of rights that are reserved. You do not need a license to express no rights reserved, you can use the public domain dedication to express the intent to reserve no rights. You do not need a license to represent all rights reserved, copyright covers that intention. The range in square brackets cover those areas of rights reserved that are covered by licenses: (C)----[BY-ND----NC----BY-SA----BY]----PD. The reason that the license is important is because of compatibility issues. If we look at the spectrum from a different perspective, the compatibility of licenses (in other words, whether we can mix compatibility issues content with different licenses). The three areas of the spectrum to the right of the compatibility gap can be mixed (and PD with anything). (C)----[BY-ND----NC--|COMPATIBILITY GAP|--BY-SA----BY]----PD. Creative Commons primer However, if the NC clause is present, the impact on compatibility is the same as if full copyright was used, you have to ask permission. The complexity or asking for permission will rise over time, and NC and asking permission even today, the complexity of asking permision for all but the simplest of derivative works is a barrier to the production of derivitive works. If the intent of OER is to produce content that can be copied and distributed, then any license that allows copying and distribution is OK. But if the intent of OER is to create valuable REUSABLE resources that can be REMIXED to create new learning opportunities, then we better make sure that to create valuable REUSABLE resources we are using the correct license. Any of the licenses to the right of the compatibility gap are OK for allowing REUSE and REMIX, any to the left of it are going to be a hindrance. In our Free Content / Free and Open Courseware stratgegy, we provide the following guidelines. We are in fact changing the default license to be BY-SA cross licensed with the GNU Free Documentation License. The reason for this is that the intent of the two licenses is identical, but the licenses are not. Cross licensing allows mixing content licensed under both (for example including Wikipedia content, → There are legitimate uses for the full spectrum of licenses. which is not strictly legal if you are remixing under BY-SA). Note that where we recommend NC we also recommend including a reversion clause, so that it reverts to a free license after a period of time. The full strategy is at http://ics.uwc.ac.za/usrfiles/content/stratpol/documents/freecourse-0.4.pdf ---->Licensing UWC content

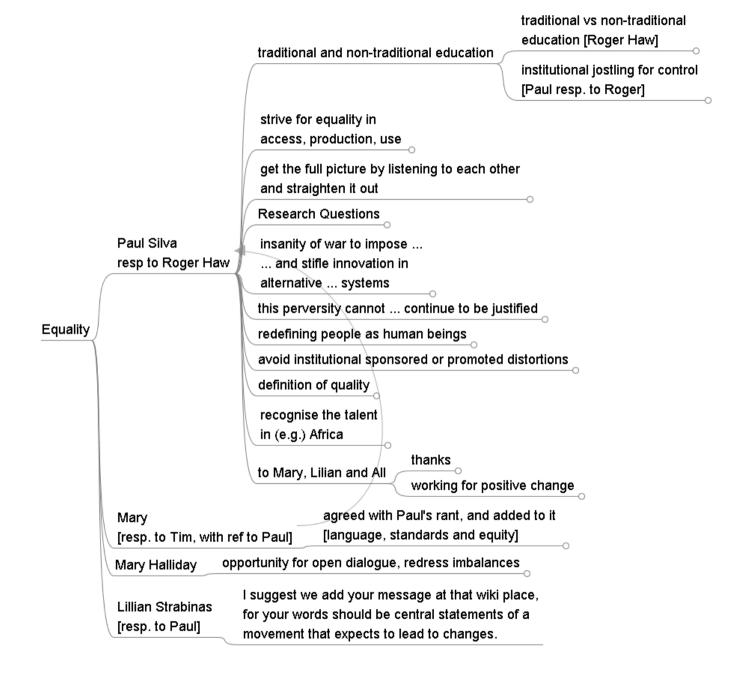
6.4 Re-use



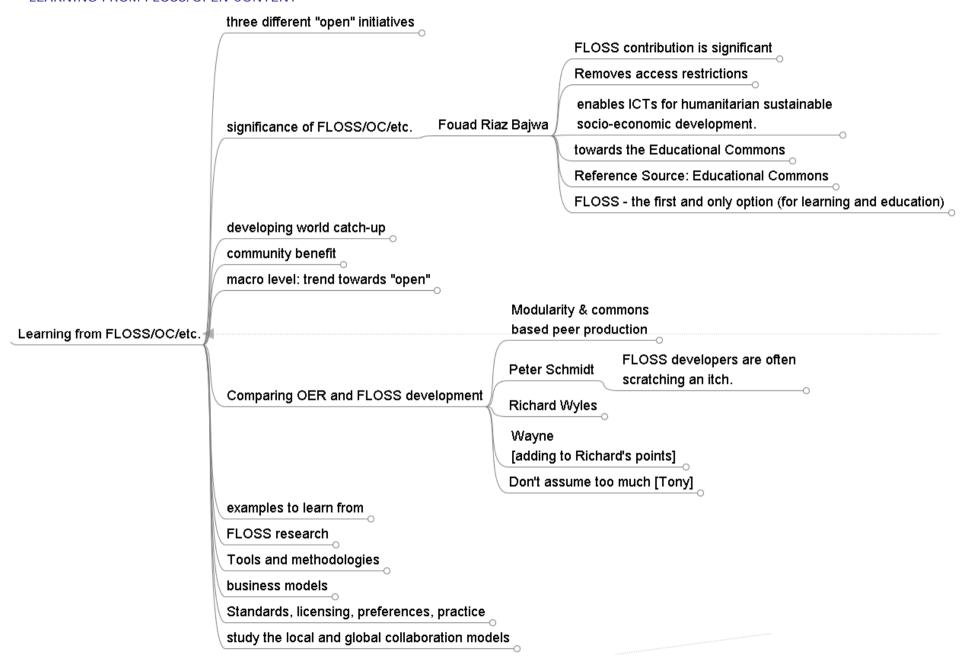
6.5 Searching



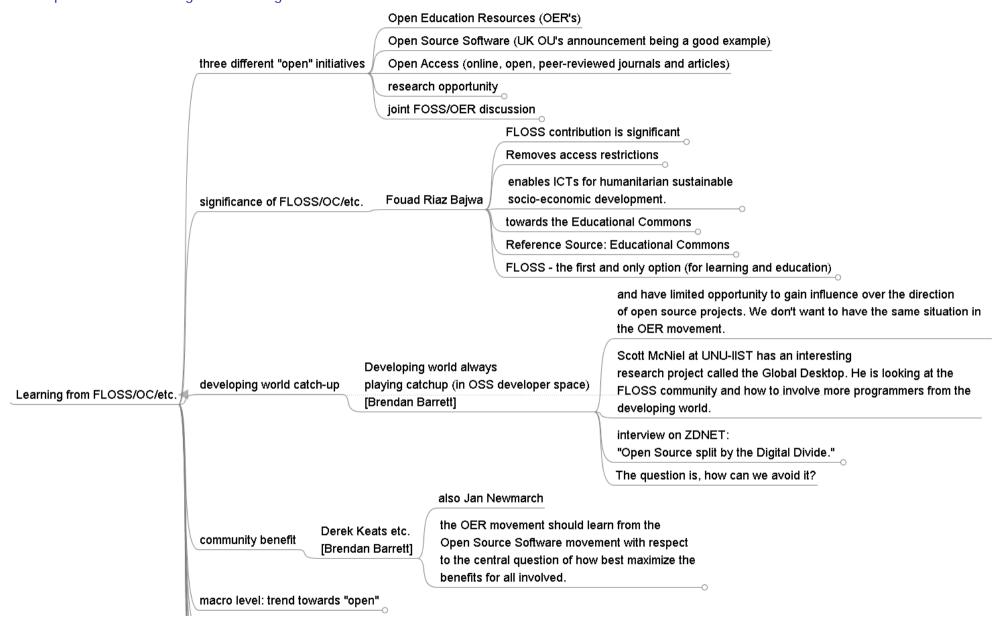
6.6 Equality



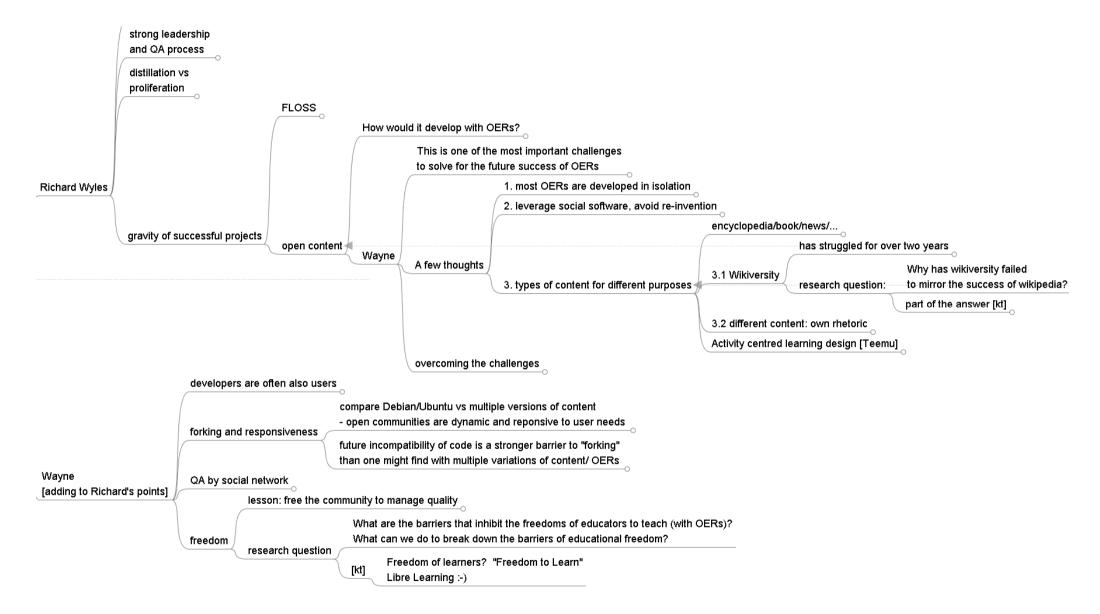
7. LEARNING FROM FLOSS/OPEN CONTENT



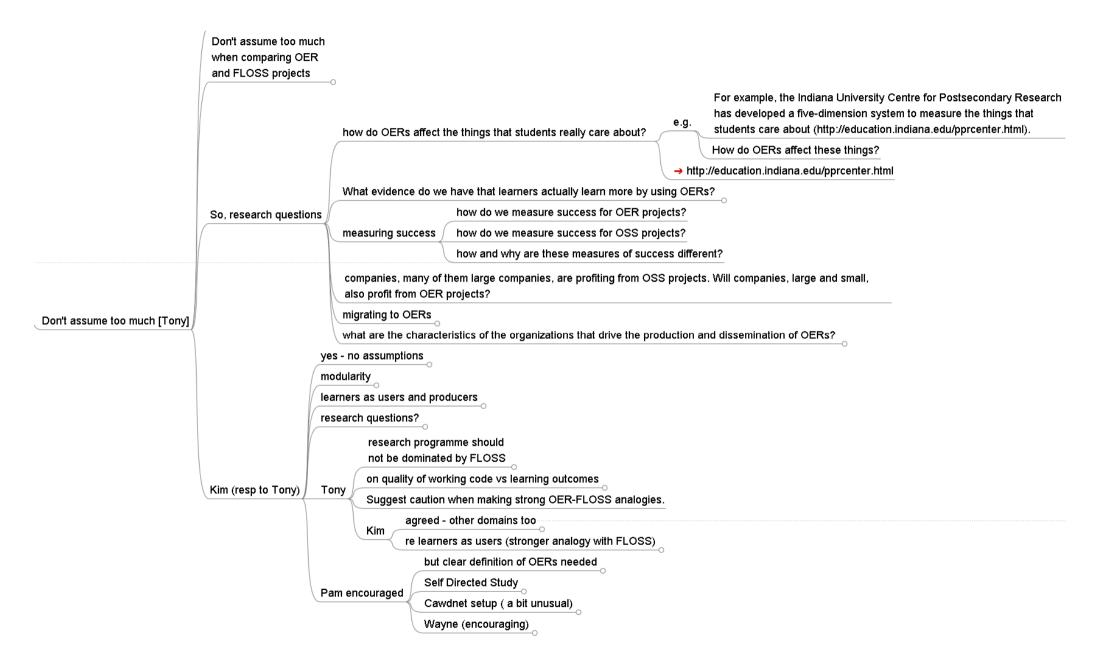
7.1 Open Initiatives: background and significance



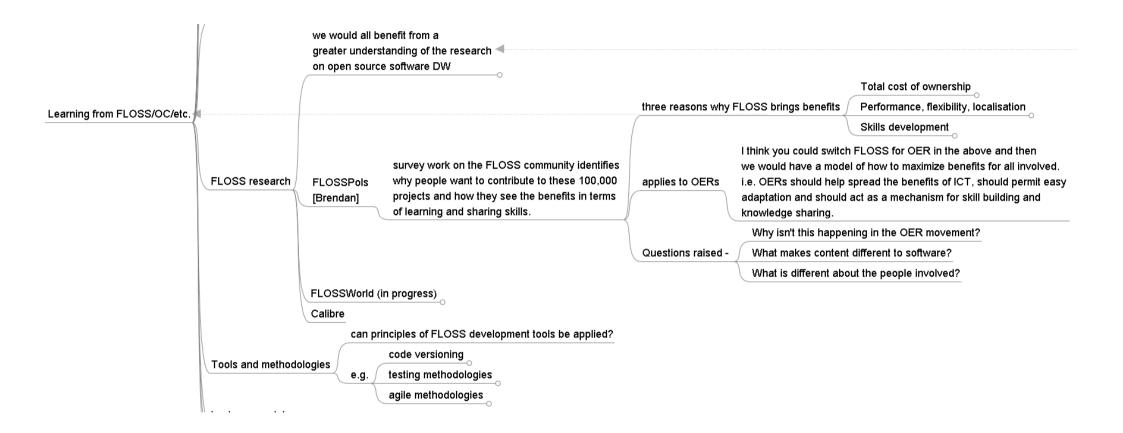
7.2 Comparing FLOSS, Open Content, OER



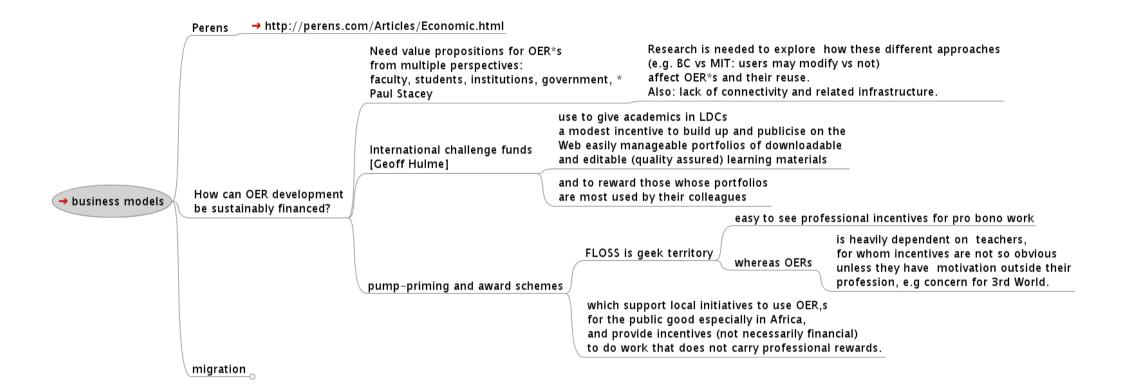
Don't assume too much



7.3 FLOSS research, tools and methodologies



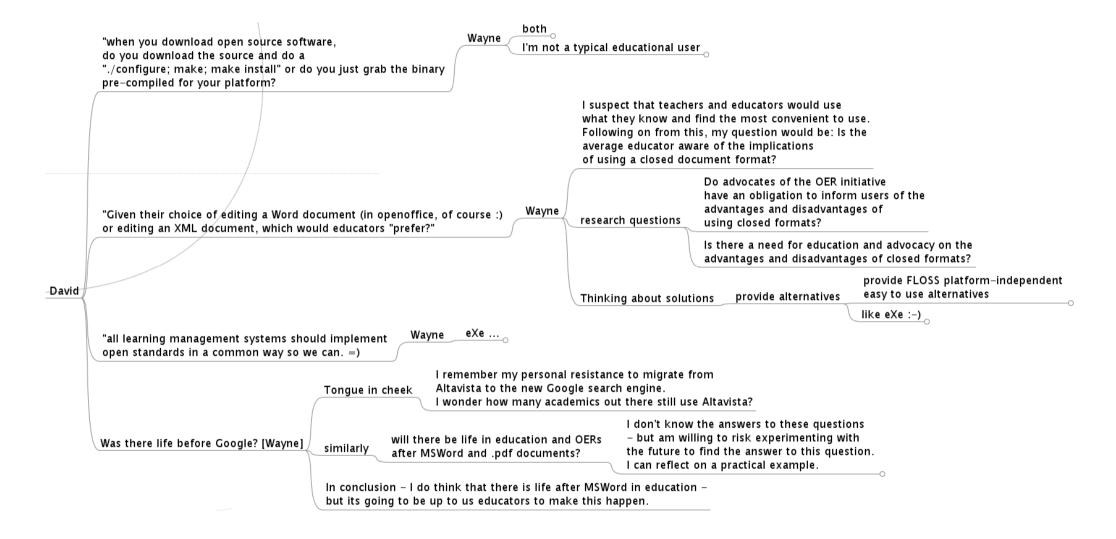
7.4 Business models



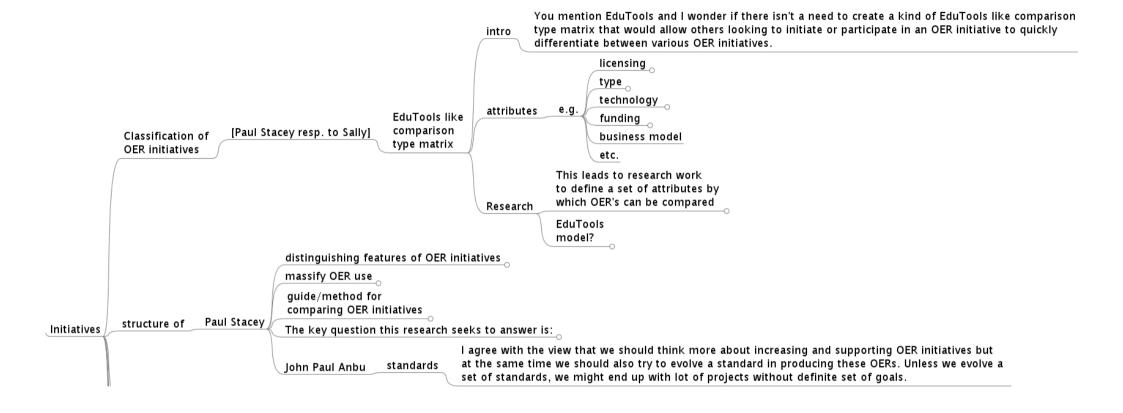
Migration

		We are interested in the methodological investigation into the following six subject matters for the purpose of discovering facts, establishing/revising theory, and developing plans of action based on the facts discovered:
business models migration Tony Bailetti		1. why and how to migrate from environments that use proprietary educational resources to environments that use open educational resources?
	methodological investigation – migration, success factors, etc.	2. what factors determine the success of the communities that develop and disseminate open educational resources?
		3. what business models can sustain the production and dissemination of open educational resources on a sustainable bases?
		4. how can individuals and small businesses in local communities generate revenue from open educational resources?
		5. how does the structure of an organization that produces and disseminates open educational resources affect its performance?
		6. how to assess the quality of open educational resources and the effectiveness of the communities that produce/disseminate them?
	Pam Great :-)	
	Has there been any research that deals with a comparative analysis of the cost of using open educational resources vs. proprietary educational resources over a period of time? If not, can there be a research focus on the cost effectiveness or returns on investment (ROI?)	
	Comparing the ROI of using open educational resources (OERs) vs the ROI of using proprietary educational resources should be in point 1 as part of the why?.	
	Tony If we use the OER conceptualization that is being used in this forum, I do not know of a single study that compares the ROI of OERs vs the ROI of proprietary educational resources. To forum organizers, an OER includes many different things, from content units to LCMS to wikis. I expect that as we firm up the research agenda we will need to clarify what is meant by an OER.	
	I think perhaps the question missing from the list is one that looks at the learners side of this, maybe something like:	
	7. how do people interact with open educational resources and what benefits do they gain in terms of learning, confidence or well-being from using them?	
	Tony agreed v	Fred, you make a good point. Had not thought about the savings due to applying standards for information storing and exchange. Will incorporate as part of 1. Thanks. Tony
1	fred Heller on (1) fred Heller on (1) non-open sour "migration" as proprietary to 1.b This again	arison must be supported by comparison of migration between rce solution. You will find, that a large effort will go for such, leaving not too much to the change between open source solutions. leads to a follow-up question: Would there be any savings, lards for information storing and exchange?

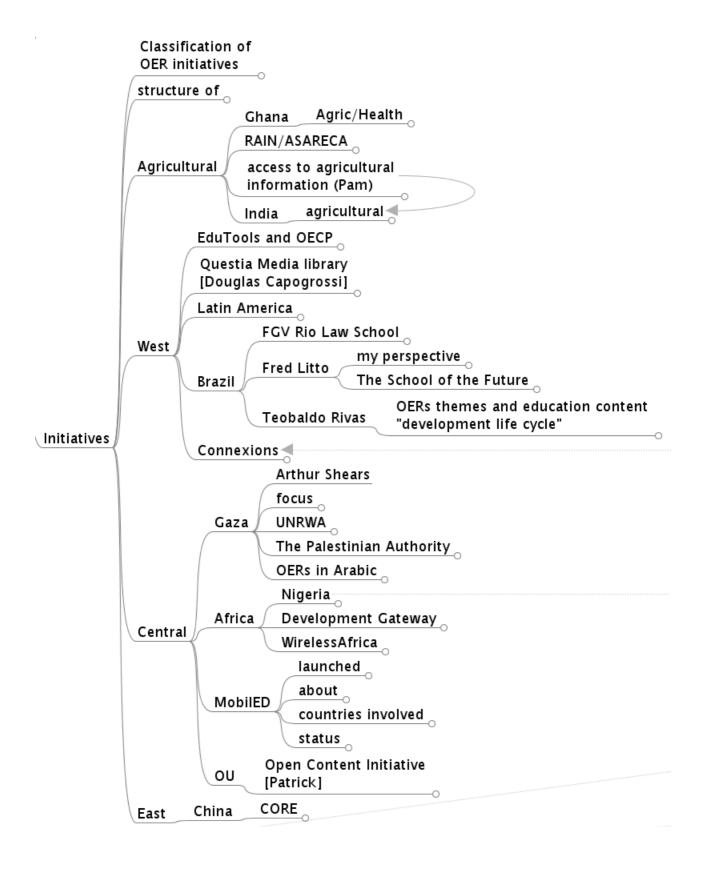
7.5 Standards, licensing, preferences and practice



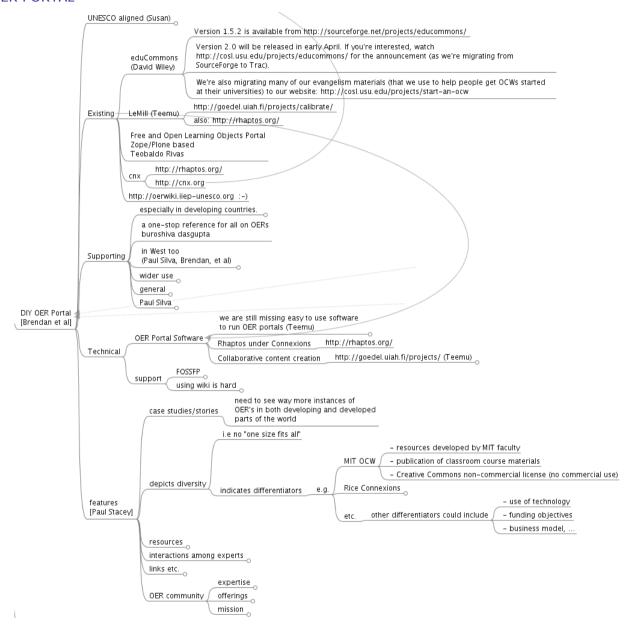
8. INITIATIVES



8.1 Initiatives mentioned



9. "DO-IT-YOURSELF" OER PORTAL



10. TOWARDS BEST PRACTICE

