The Open University

Open Research Online

The Open University's repository of research publications
and other research outputs

Engaging the community in multidisciplinary TEL research: a case-study from networking in Europe

Conference or Workshop Item

How to cite:

Camilleri, Anthony Fisher; Barak, Noaa; Burgos, Daniel and Ullmann, Thomas D. (2010). Engaging the community in multidisciplinary TEL research: a case-study from networking in Europe. In: EDEN 2010 Annual Conference: Media Inspirations for Learning. What Makes the Impact?, 9-12 Jun 2010, Valencia, Spain.

For guidance on citations see FAQs.

Version: Version of Record

Link(s) to article on publisher's website:
http://www.eden-online.org/home/highlights.html

oro.open.ac.uk

ENGAGING THE COMMUNITY IN MULTIDISCIPLINARY TEL RESEARCH: A CASE-STUDY ON NETWORKING IN EUROPE

Anthony Fisher Camilleri, SCIENTER, Noaa Barak, ATOS Origin, Daniel Burgos, ATOS Origin, Thomas D Ullmann, Open University

Introduction

The STELLAR Network of Excellence was launched in February 2009 with the explicit intention of *Sustaining Large Scale Multi-Disciplinary Research in Technology Enhanced Learning*. So as to support this aim, the network has defined a number of different activity tracks, aimed at building capacity amongst senior-level researchers/decision makers, mid-level researchers and junior researchers/PhD students as well with a separate track dedicated to building community level capacity.

In the abstract, the 'community' around any research study might usually be defined as the subject of the research. However, the focus of the community-capacity building activities of STELLAR, considers the role of the community as object of the research – a main consumer of the products of research, and having a stake in setting the research agenda itself. Thus, on the one hand, the STELLAR consortium needs to inform its actions and activities based on needs and wishes of stakeholders, while at the same time it intends to mobilise the same stakeholders, to forge common policy positions with respect to future development of TEL in Europe.

This paper takes these activities as a case-study in structured social-network design, and considers the impact such activities may have on the field of technology enhanced learning in the coming years. The data is based on the first year of activities of the network, which are intended to last 40 months and are designed around the overlapping activities of connecting, orchestrating and contextualising stakeholders.
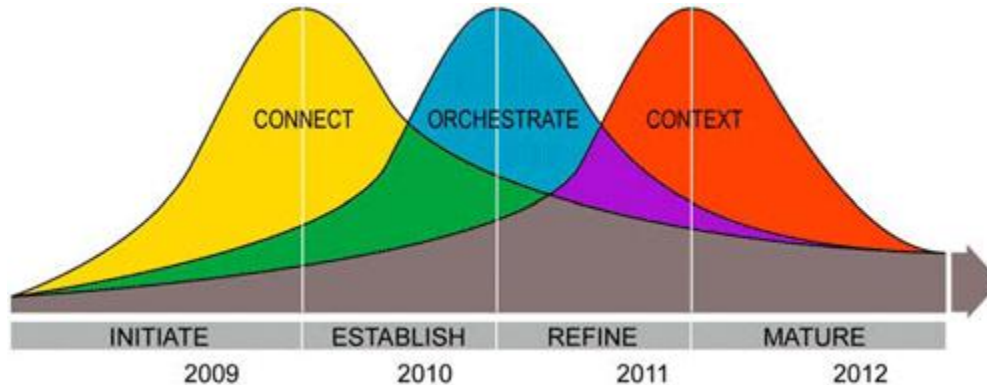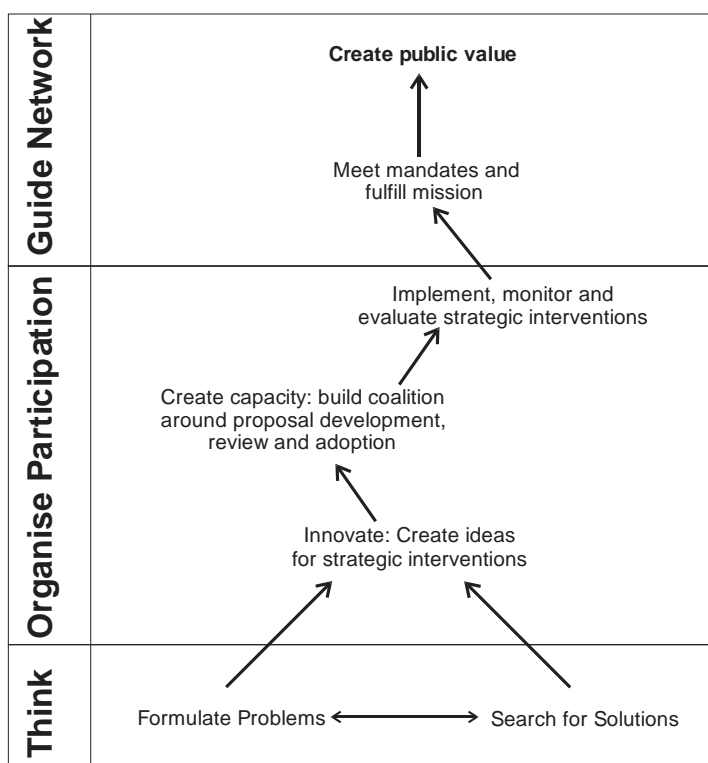

Theory

In an organisational setting, the most oft-cited definition of a stakeholder is that of "any group or individual who can affect or is affected by the achievement of the organisation's objectives" (Freeman, 1984). In a public/non-profit sector, this definition might be restates as "All parties who will be affected by or will affect [the organisation's] strategy (Nutt & Backoff, 1992). As stakeholder theory has developed, the realisation that, once empowered, stakeholders often act in concert to achieve particular aims let to the coining of the term *stakeholder learning network*, defined as an "interactive field of organisational discourse occupied by all stakeholders who share a complex, interdependent and on-going problem domain and who want/need to talk about it. Within this domain the corporation is not so much a system within itself as a participant in a larger system that includes other stakeholder citizens". (Calton & Payne, 2003).

The STELLAR network has chosen to integrate these definitions into a principle, stating that "through one's representatives, a person should have a stake in any process or decision which has a concrete effect over one's life" (Camilleri, et al., 2009), and which serves at once as the definition and *raison d'etre* of the stakeholder network being established by the consortium, and notably close to Reed's claim that "we all have a stake in all members of the communities to which we belong living in accord with the norms and values of our shared identity" (Reed, 1999)

The diagram on the right (adapted from: (Bryson, 2004)), summarises the implicit theory regarding stakeholder involvement as found in most public sector-oriented strategic-management literature.

It shows that creating public value (an implicit aim of any publicly funded project, such as STELLAR) starts with a thinking process involving a simultaneous and mutually dependant process of formulating problems and searching for solutions. By organising participation, rather than leaving allowing it to be completely spontaneous, (a simple example of which might be a brainstorming session), the leader of a stakeholder network can stimulate a process of innovation, leading to idea creation and invention which can be used to improve the situation (i.e. intervene) in the thematic area in question.

Once formulated, an innovation can be implemented, as long as sufficient capacity is put in place to allow the idea to come to fruition, again needing organised participation such as that supplied by a stakeholder network.

Guide Network

Create public value

Meet mandates and fulfill mission

Organise Participation

Implement, monitor and evaluate strategic interventions

Create capacity: build coalition around proposal development, review and adoption

Innovate: Create ideas for strategic interventions

Think

Formulate Problems ⟷ Search for Solutions

This, in turn, serves the ultimate purpose of the organisation leading the process, allowing it to meet its mandates and fulfil its' mission, while at the same time influencing organizational learning processes: including intuition, interpretation, integration, and institutionalization. Influence from stakeholder interactions can further generate feed-forward and feedback learning flows (moving up or down) through the learning ladder of the organisation, which may renew or reinforce the existing organizational routines, capabilities or core competences (Minyu & Eweje, 2008).

According to Svendsen & Laberge, this process of organising participation, or, in their terminology, network-convening, is a co-creative process, which involves three phases of activity outreach, collective learning and joint action/innovation (Svendsen & Laberge, 2005). Each of the phases is summarised below:

Phase	Objective	Outcomes
Outreach	Identify the issue and/or compelling questions that hold sufficient interest to warrant the formation of a stakeholder network, and share these with appropriate parties	- Framing of the key issue/question - Identifying and involving members of the system - Defining the goals of the network - Articulating and agreeing on guiding principles and network norms - Sharing of background information - Establishing timely and effective communication linkages and methods - Clarifying roles and responsibilities
Collective Learning	Increase individual knowledge as well as the collective intelligence and capacity of the network as a whole	- Develop new knowledge about the issue and the larger system - Define possible scenarios - Construct shared meanings that allow people to understand each other and work together effectively - Clarify common ground and differences in perspectives, interests and needs - Build trust and commitment
Innovation / Joint Action	To take system-wide action together on a problem or opportunity, so as to reach common	- Clear, project-specific goals - Shared vision for the network - Action plan

	goals/purpose	

Scholl claims that there is no such thing as a unified stakeholder theory, with two distinct strands having spun off the initial conceptualisation by Freeman, namely a normative and instrumental view of the purpose of stakeholder networks. (Scholl, 2001)

The community capacity building activities within STELLAR were designed based on experience of the consortium partners in organising similar initiatives, most notably within the KALEIDOSCOPE[1] and PROLEARN[2] networks of excellence which preceded the project. This said, the stakeholder engagement strategy being used by the consortium shows strong coherence with the instances of stakeholder-network theory explained above, and thus, the activities of the network will be described within the parameters of these theories.

Connecting to Stakeholders

During its' first year, the consortium has focused primarily on what it calls the *Connect* phase of stakeholder engagement, which closely corresponds to what we termed the *think* phase of the Bryson model and the *outreach* phase as defined by Svendsen & Laberge.

Framing Key Issues / Defining Goals

Due to the project management cycle of an EU-funded project such as STELLAR, these were formulated in the phase of proposal preparation, and were thus taken as the starting point of project activities. Thus, the guiding objectives of the network have been to:

- overcome the fragmentation of disciplines and reach a real multi- and trans-disciplinary approach that TEL research needs

- reduce community fragmentation by bringing together the key stakeholders in European TEL and stimulate ongoing knowledge exchange between them

- look beyond the Network partnership and actively solicit the exchange of views, knowledge, feedback and visions of key stakeholders in TEL: researchers, developers, end-users both in education and in industry.

Stakeholder Identification

An evolving transformation of the mind-set of community life is leading organisations of all types to be confronted with a membership with changed standards of behaviour which can be problematic to fit into the usual settings of these institutions (Barchechath, 2004). In spite of this, the institutional framework itself, has hardly changed (Giddens, 1999), complicating the process of identifying and categorising stakeholders.

These concerns led to a shying away from a categorisation of stakeholders to describe them, in favour for a more sophisticated tagging approach, which would allow for the specific context of any individual or organisation with respect to TEL to be considered fully, thus avoiding the need to characterise them from a mono-polar viewpoint. The mapping methodology developed considers that any stakeholder in TEL can be described in terms of three identities, namely:

- by role/profession: in a professional sense, this is the primary moniker any individual or organisation would use to identify themselves, and gives an idea as to the daily functions, i.e. *type* of work an individual/organisation might perform

- by industry grouping; this allows for some refinement, and definition as to the *nature* of the work. Thus for example, the post of researcher at a public research institution investigating effects of technology on learning, and that of a researcher working for an educational equipment provider are vastly different

- by interest in TEL: this final factor lets us to consider the *closeness* of the individual or organisation to the field, making a distinction between those who work in the field, and those who merely come into contact with it by association

---

[1] See http://ug.noe-kaleidoscope.org for more information
[2] See http://www.prolearn-project.org for more information

Within each of these categories, the project has identified the following tags, which can be applied to any individual or stakeholder group:

By role	By Industry Grouping	By Interest
• Students in formal education • Lifelong learners • Teachers • Researchers • Education Professionals • Policymakers • Knowledge Workers	• Education & Training Providers • Education & Training Suppliers • Research Institutions • Knowledge Industries	• TEL Researchers & Practitioners • Those working with TEL • Those affected by TEL

Once stakeholders have been mapped using the above tool, the network has also developed a methodology, adapted from guidelines suggested by the World Bank for use in the field of healthcare (Schmeer, 2000), to measure the 'alliance potential' of each stakeholder, effectively creating a ranking of stakeholders according to the aims and objectives of the network, and thus allowing the network to prioritise its resources. The alliance potential is built using the following matrix:

Category	Sub-Divisions	Definitions
Stakeholder Info		Name/ID of stakeholder
Knowledge	Level	Numerical indicator on amount of knowledge on policy (1)
	Definition	Summary of stakeholders' views on policy
Position		Numerical indicator to measure degree of opposition/agreement with policy (2)
Interest	Level	Numerical indicator of level of interest in policy (3)
	Definition	Summary of reasons for stakeholders' interest in policy
Resources	Quantity	Numerical indicator of resources available (4)
	Ability to mobilise	Numerical indicator of ability to mobilise above resources (5)
Leadership	Networking Potential	Numerical indicator of strength of allied network on policy issue (6)
	Leadership	Numerical indicator or willingness to take a leading role in deploying policy (7)
Alliance Potential		Composite indicator based on above

Definition of the Numerical Indicators in mapping tool:

Ref	Name	Measure	Definition	Rationale
1	Knowledge on Policy	0.5	Not Knowledgable or very little knowledge	0.5 measure due to assumption that ignorance of policy will prove damaging in advocacy
		1	Knowledgable	
		2	Expert in Policy	
2		3	Supporter	Negative values

Degree of opposition/agreement with policy	2	Moderate Supporter	for opposition since stronger opposition is inversely proportional to alliance potential.
	1	Neutral	
	-1	Moderate Opponent	
	-2	Opponent	
3 Interest in Policy	3	Deeply invested in policy (policy will have dramatic effects on stakeholder)	0 for disinterest, due to the fact that this effectively disqualifies group as stakeholder
	2	Interested in Policy	
	1	Fairly Interested in Policy	
	0	Completely Uninterested	
4 Resources Available[3]	3	Extensive Resources Available	
	2	Moderate Resources Available	
	1	Low Resources Available	
5 Ability to Mobilise	1	YES	Can organisation commit resources in support of the policy?
	0	NO	
6 Networking Potential[4]	3	High	The Networking Potential on the *specific policy*
	2	Moderate	
	1	Not able to network	
7 Willingness to take a Leadership Role in Supporting Policy	3	Evangelist	
	2	Leader	
	1	Supporter	
8 Alliance Potential	The Alliance Potential will be calculated by multiplying the values achieved in all 7 points above, with the highest level of engagement being suggested with associations at the top of the list due to a) high interest and b) high ability, in pursuing the policy goals. On the other hand, associations at the bottom of the list (in negative territory) would be classified as opponents of the policy.		

Thus, the final stakeholders' table would look like this:

Identity	Perception of Topic	Reason for Interest	Alliance Potential

Establishing Communication and Linkages

The main tool established by the consortium for communication and linking with stakeholders is an online social network, which has been branded as TELeurope.eu (and can be found at the same URL). The TELeurope community will grow over time and will work towards developing its own identity, its own agenda and its own instruments (Windrum, et al., 2010), many of which will include interactive Web 2.0 widgets connecting with mashup activities being done by other parts of the consortium. At the end of April 2010, the community counts 325 members and 18 special interest groups.

The STELLAR network has engaged in a multi-faceted strategy to attract stakeholders into this community, involving the following strategies:

---

[3] Resources can be human, financial, technological, political or other. The Resources tab is thus an overall assessment of the strength of the organisation

[4] The Networking Potential needs to take into account not only the strength of the network as a whole, but also the alliance potential of the various stakeholders in the network

- viral marketing: the initial membership of the network has been made up of staff members of the STELLAR consortium itself, bringing in membership from 16 organisations who are all active in some way in the field of TEL. Thus, the initial wave of expansion should come from direct invitations to join the network from this initial membership. While this has not led to a dramatic number of recruits to the network, the members recruited through this channel have tended to be most active in community-building activities on the platform

- conferences: this has proven to be the most successful strategy for recruitment, involving marketing from a stand, or during sessions at conferences. Thus, a stand set up at the Online Educa event in December 2010 led to the recruitment of around 30% of the current membership of the portal within a space of 3 days

- direct marketing: the consortium has prepared a list of networks, associations, individuals and projects which might be interested in the themes of the project, and has started a process of mailing them with an invitation letter to join the network. As the activity has just started, it is too early to assess the success of this effort

Asking Questions – Finding Solutions

The work within STELLAR are guided by three grand challenges, which are the basis from which the work in STELLAR is being organised, and which essentially form the 'think' basis of the work. The grand challenges are described as following (Sutherland, et al., 2009):

- **Connecting learners.** is concerned with the potential of ICT to connect people with others who may be in some way relevant to their learning. It includes using ICT for knowledge building and sharing, communication and collaboration. The focus is the use of Web 2.0 tools both within educational institutions and in the world of work. An important part of the discussion addresses the concerns arising from the 'democratisation' of knowledge which is considered to be a key value underpinning Web 2.0. The questions emerging from this challenge focus on new ways of understanding knowledge and the building of knowledge and ways in which to design and organise the use of technologies that make new ways of communicating possible.

- **Orchestrating learning**. TEL learning situations can be very complex and it is important to understand how they are organised and how they work. Questions raised under this challenge concern ways in which to support teachers and more knowledgeable others in orchestrating TEL and ways in which the use of digital technologies challenge understanding of, and current practices in, orchestrating learning.

- **Contextualising virtual learning environments and instrumentalising learning contexts**. This challenge considers that technologies for learning should be designed to take into account the ways in which the settings where they will be used are mediated by the cultural context. The questions raised focus on understanding how novel experiences affect teaching and learning and the ways in which technology should develop in order to support novel experiences.

Up until this point, the discussion around the Grand challenges has happened mainly within the confines of the STELLAR network. This said, the stakeholder networking strategy has been aligned with the grand challenge research work within the consortium, to the point that it uses the same Connecting/Orchestrating/Contextualising terminology to describe its work. From the beginning, the project aimed to 'aggregate the wisdom of the crowds', and thus the challenge for the network in the next year is to extend the discussion into the stakeholder community, so as to allow for the intertwining of multiple voices (Sutherland, et al., 2009), thus moving the *stakeholder network* into the orchestration/organising participation phase.

Orchestrating a Stakeholder Network

From a theoretical basis, the 'orchestrate' phase of stakeholder engagement in STELLAR shows significant similarity with the 'Organising Participation' phase as according to Bryson, and the 'collective learning' and 'innovation' phases as per Svendsen & Laberge.

To organise a *quality* co-collaboration environment, which can support peer creation (i.e. creation of new ideas/innovation as per Bryson), as well as peer validation (increasing the collective intelligence as per Svendsen & Laberge) it is necessary to establish a set of enabling tools and a set of enabling processes, set within a larger framework of enabling policies (Auvinen & Ehlers, 2009). As has been described above, the consortium has put into place enabling policies in terms of the active support of the STELLAR network for the TELeurope.eu initiative, in terms

of guiding principles, political and logistical support. In addition, the enabling tools for the network are in place in terms of the TELeurope.eu portal, which is running at http://www.teleurope.eu utilising an ELGG platform, and supporting all typical social network features such as discussion groups, file-sharing, blogs, maintenance of a 'friend' network, notification of 'friend' actions etc. In addition, a widget infrastructure is currently being put into place, giving users of the portal access to a rich variety information sources including news, publications, conferences, ongoing research, TEL blogs and more, functionalities which are being added to the portal by a dedicated working-group on 'Science 2.0' within the STELLAR consortium. In line with the project's commitments to openness, the entire infrastructure utilises open-source software, and software development done for the platform is also being released under open-source licenses.

With regards to the widgets, ELGG allows integrating customized functionalities. The "Science 2.0 for TEL" working group of STELLAR, establishing a Science 2.0 mash-up infrastructure (Wild & Ullmann, The STELLAR Science 2.0 Mash-Up Infrastructure, 2010) (Wild & Ullmann, Science 2.0 Mashups, 2009) capabilities especially for research practice. The infrastructure builds upon research related Web Services and APIs in the cloud mashing them up to combine formerly separated functionalities to aggregated services and tools. We illustrate with four selected examples within the area of a wider set of defined use-cases (Wild & Ullmann, Science 2.0 Mashups, 2009) how the Science 2.0 mash-up infrastructure provides benefit for researchers using the TELeurope.eu platform.

Example 1: The publication feed widgets helps researchers with finding relevant literature. It exposes a retrieval and result visualisation interface for faceted browsing and searching. One of the visualisation again provides a timeline overview realised with SIMILE[5], whereas facets help to filter the result set according to authors, years, and tags.

Example 2: Keeping track of the latest TEL related resources is common task for researchers. A widget showing the latest publications added to STELLAR's Open Archive, an TEL specific publication repository, provides this information. This widget uses a feed rendering application from an external provider (Grazr[6]), which consumes the RSS feed exposed by the archive.

Example 3: Graaasp is a Web 2.0 application that can serve simultaneously as an aggregation, contextualization, discussion, and networking platform, a shared asset repository, as well as an activity management system. The Graaasp widget displays the spaces of the currently logged in user in his research dashboard.

Example 4: A widget supports the 'collaborative writing' use case. Within STELLAR, many deliverables are in fact 'living' deliverables: wikis are used to collaboratively create the reports. The wiki timeline widget uses the latest changes' history provided by the underlying MediaWiki[7] and uses the SIMILE timeline[8] visualization to inform editors and authors about the nature of change (over time).

This four examples show how the combination of existing and newly developed services and tools can be orchestrated to form new applications supporting TEL specific practice.

Partially due to the infancy of the platform, the STELLAR consortium has yet to establish *processes* which enable discussion, learning and knowledge creation within TELeurope, having up until this point relied upon a more autonomous, unstructured and viral processes to drive these actions within the community. However, an analysis of the interaction on the portal shows that despite a successful recruitment drive which has led to a strong membership, the quantity and quality of interaction within the community still lags significantly behind that which would be expected to achieve the aims of energising a stakeholder community and reducing fragmentation of disciplines.

We suggest that, in the case of the TELeurope *portal*, organising participation requires creating a link between the identification of problems/solutions and the creation of ideas. Thus, the experience of TELeurope so far shows that reaching the suggested outcomes of the outreach phase as explained by Svendsen & Laberge does not imply automatic progression to collective learning and innovation. Thus, we believe that the concept of enabling processes can establish this bridge between the various phases. Thus, the network is currently tweaking its' strategy to include processes of:

---

[5] http://www.simile-widgets.org/timeline/
[6] http://grazr.com/
[7] mediawiki.org/
[8] http://www.simile-widgets.org/timeline/

- provocation: using 'hot' topics as a starting point for discussions, for the sole purpose of stimulating debate and participation, which momentum would solidify the community, and lead on to more concrete application in other fields

- animation: beginning the interaction between members of the STELLAR network, with the explicit aim of collective learning and innovation around the themes defined in the grand challenges, in an open and participative manner, so as to allow stakeholders to join in an already on-going process with demonstrated benefits, rather than needing to overcome the barriers inherent in seeding the process themselves

- elicitation: asking network members for input on concrete issues, which would feed into on-going research and advocacy activities being organised by the STELLAR network

Over the next year, the network will enhance the stakeholder engagement activities, through the creation of a number of panels which will bring together key representatives of stakeholders, to feed into the overall engagement strategy of the network. These panels will include a network of networks, a research & innovation group, and a stakeholder advisory board. The network of networks will connect existing networks in technology enhanced learning and aim to foster inter-community dialogue by bringing together 20-30 representatives of TEL associations to discuss common issues. The Research & Innovation Group will discuss innovative ideas, the TEL research agenda, funding opportunities and relevant opportunities for exploitation, standardisation and legislation; its membership will consist mainly of key individuals coming from SMEs. The stakeholder advisory board will keep an overview of the activities of the STELLAR network in general so as to act as a review panel, and be made up of 8-12 high profile members from research, industry and the public sector. (Barak, et al., 2009)

Monitoring and Evaluating Interventions

An overall framework for monitoring interventions and evaluating their success has been set, which uses the concept of the logical framework matrix as the starting point for the development of an evaluation framework. Thus, the framework as developed, allows one map to the objectives, inputs, activities and outputs of the project, and applies a framework of indicators to it, using the following relational structure (Fiedler, Heinze, Kieslinger, & Cress, Baseline STELLAR Evaluation Report, 2009):
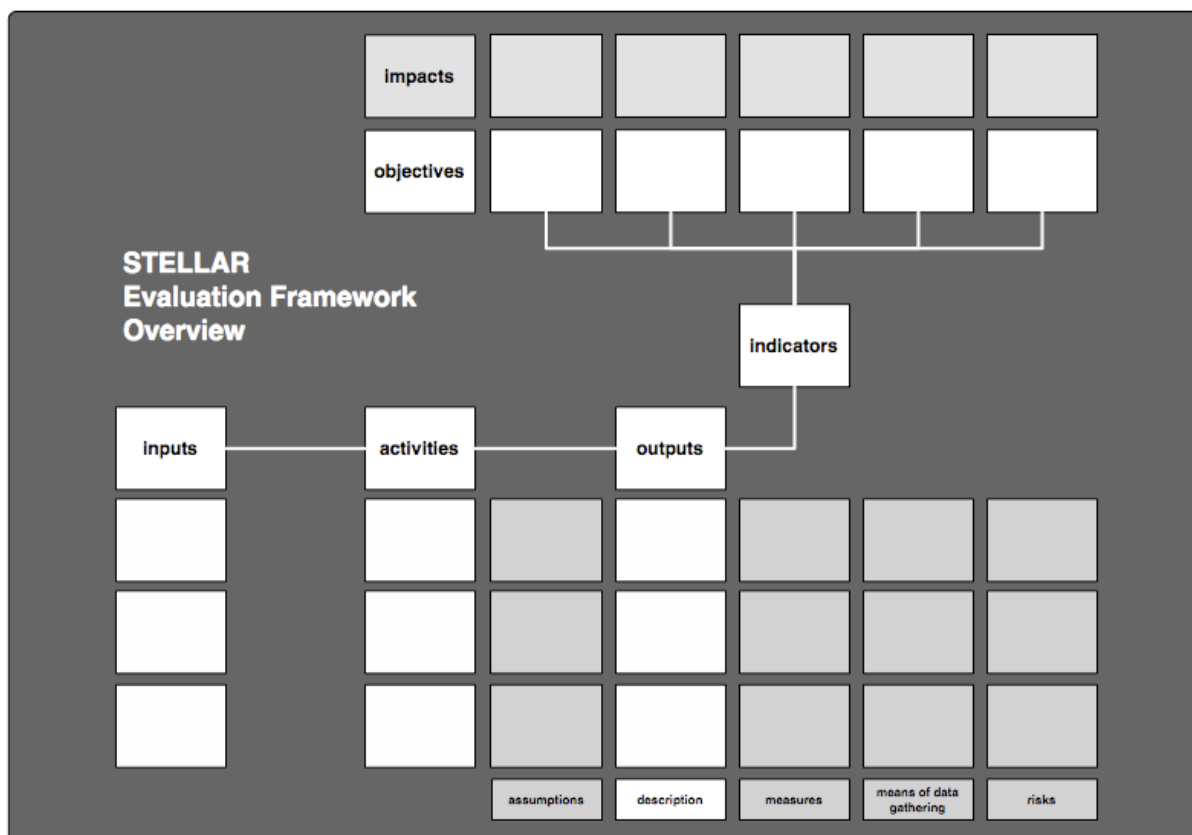
The evaluation process is run by a group independent of that carrying out the actual activities, to ensure independence in the evaluation, and has resulted in the definition of a set of qualitative and quantitative indicators for measuring the

quality of the networking activities, with the chosen indicators showing a tilt towards the instrumental as compared to the normative view of stakeholder network theory. Thus, a sample of the indicators chosen includes: diversity of the members of the stakeholder panel, relevance and uptake of recommendations from stakeholders, relevance of events for stakeholders, number of activities at STELLAR specific events, etc (Fiedler, Heinze, Kieslinger, & Cress, 2nd STELLAR Evaluation Report, 2010).

The impact level of the evaluation framework is intended to consider the long-term impact of the project, beyond its mid-term agenda setting for TEL research in Europe. Thus, the explication of this layer has not to this point been prioritised. With respect to the impact on stakeholders, the indicators measure the quantity of the interaction, and the relevance of the interaction, however they fail to measure the *quality* of the interaction, in terms of monitoring the actual processes of collective learning and of innovation within the project. Further, the adequate means for tracking activities are yet to be fully implemented, making the collection of data for evaluation a challenging task.

Markiewicz summarises the views of several authors (such as Stark, Patton, Lincoln, Bryk, Stake, Guba…) in saying that "Multiple stakeholders [in evaluation] reflect a democratic process where diversity of values and interest in society are represented. Furthermore, where multiple stakeholders are represented, there is improved relevance of the evaluation, increased commitment to the evaluation, and the opportunity for enhanced evaluation use." (Markiewicz, 2005). For the moment, the evaluation plan of the project does not include any such engagement, although the terms of reference for the advisory board do imply a review function for the board. The project has yet to establish a formal link between the evaluation activities and those of the stakeholder advisory board, however these are planned for the second year of the network.

Context

While in the projected timeline, the peak of the contextualising phase is still around 20 months away, the framework for such contextualisation has already been set. Within the overall framework of the STELLAR project, the networking activities will help achieve the objectives of establishing and institutionalising discourse and exchange with selected stakeholders in Europe as well as that of increasing international visibility and reputation of TEL research in Europe.

In the preparatory phases of this contextualising, the STELLAR network decided to design its' stakeholder networking activities from the bottom-up with long-term network sustainability in mind. The most obvious sign of this has been the decision to use a separate brand, that of TELeurope supported by STELLAR, as the umbrella under which to organise all stakeholder activities. The idea here was to give this initiative a separate identity from the Network of Excellence, and make it clear to all participating, that the ambitions of these activities are to sustain a stakeholder network, as opposed to sustaining activities of the STELLAR network.

However, when it comes to the specific outcomes or success criteria that might arise from such a network, the picture is still hazy. Up until this point, a discussion has been held amongst STELLAR network members as to what the long-term outcomes might be (reported on in Fiedler, Heinze, Kieslinger & Cress, 2010), as well as an initial scoping meeting with stakeholders on the same topic, (reported on in Windrum et al). This shows a significant bias towards the normative view of stakeholder theory, in that stakeholders are only being instrumentalised in so far as it is the mission of STELLAR to sustain technology enhanced learning and reduce fragmentation in the fields. As to the specific research to be conducted together with stakeholders, or the policies to eventually be promulgated by the network, this is left largely up to the stakeholders, who will formulate these rather independently, although within the frame of the Grand Challenges, as the TELeurope initiative continues to gather pace.

Conclusions

This paper first of all demonstrates that the networking efforts of the STELLAR community in creating TELeurope show many of the characteristics of a stakeholder network in line with stakeholder network theory. Despite Scholl's claims that stakeholder networks (and the corresponding theory) take two separate and non-compatible directions, the STELLAR community shows features of both normative and instrumental stakeholder networks. We do not claim that the experience of creating TELeurope has produced a unitary stakeholder network theory. Rather the dissonance comes from the fact that the STELLAR network has, as one of its founding objectives, that of creating a stakeholder network, leading to a situation where its normative actions are, by this rationale, also instrumental in that they serve the aims of the network. This said, the array of tools deployed by the network, can tend to swing more towards one of the theories, with, for example the Stakeholder Advisory Board being more instrumental while the Network of Networks is clearly more normative.

The paper continues to describe the elements of the stakeholder engagement plan as deployed by the STELLAR network in TELeurope, the activities conducted so far, and the plans for the future. It explains the consortium's approach to stakeholder analysis, particularly the adaptation of existing methodologies, to produce a numerical ranking of stakeholders, by 'alliance potential'.

In explaining the setup of TELeurope, it references the work of Svensen & Laberge, and adapts the work of Bryson to explain these activities. The experience of the project to this date shows that the achievement of the basic conditions for propagation of a stakeholder network do not necessarily automatically lead to subsequent collective learning, innovation and the creation of public value. This paper proposes the concept of 'enabling processes', as expounded by Auvinen & Ehlers, as a possible way to bridge these phases, and explains the plans of the consortium to apply the theory to the network.

In terms of network evaluation, the paper concludes that the network's evaluation policies, while sound, are not all-encompassing. Particularly it finds that while the principle of multi-stakeholder evaluation exists within the instruments of the stakeholder community itself, in terms of the stakeholder advisory board, these are not tied directly to the evaluation instruments of the project. Furthermore, its analysis of the indicators for evaluation being used by the project finds that they do not include measurements that would be able to meaningfully assess the processes of collective learning and innovation within the stakeholder network in the short-medium term.

Overall, we conclude that at its current stage of development, the TELeurope initiative shows significant promise, and, without excluding the need for further improvement, has put in place the right structures and policies to sustain a network of the sort. However, to reach its high level objectives, the consortium will have to devote considerable resources into both maintaining the recruitment drive, as well as, more importantly, converting the network into a genuine forum for the creation and transfer of knowledge. In addition, we suggest that the network's guiding principles, in terms of the Grand Challenges, be further developed, particularly in terms of setting success targets (from a policy perspective) so as to be able to better serve the purpose of serving as rallying points for coalition building.

Bibliography

Auvinen, A.-M., & Ehlers, U. (2009). *Quality Management of Peer Production: Quality Management Handbook.* QMPP Consortium.

Barak, N., Burgos, D., Camilleri, A. F., Specht, M., Windrum, C., deVries, F., et al. (2009). *Stakeholder Engagement Plan: Report on Guidelines and Monitoring tools-metrics.* STELLAR Network of Excellence.

Barchechath, E. (2004). *Methodological and Conceptual Framework.* KALEIDOSCOPE Network of Excellence.

Bryson, J. M. (2004). What to do when Stakeholders Matter: Stakeholder Identification and Analysis Techniques. *Public Management Review, 6*(1), 21-53.

Calton, J. M., & Payne, S. L. (2003). Coping with Paradox: Multistakeholder Learning Dialogue as a Pluralist Sensemaking Process for Addressing Messy Problems. *Business & Society, 42*(1), 7-42.

Camilleri, A. F., Barak, N., de Vries, F., Joubert, M., Specht, M., Windrum, C., et al. (2009). *Report on the Process of Establishing a Stakeholder Panel.* STELLAR Network of Excellence.

Fiedler, S., Heinze, N., Kieslinger, B., & Cress, U. (2009). *Baseline STELLAR Evaluation Report.* STELLAR Network of Excellence.

Fiedler, S., Heinze, N., Kieslinger, B., & Cress, U. (2010). *2nd STELLAR Evaluation Report.* STELLAR Network of Excellence.

Freeman, R. (1984). *Strategic Management: A strategic approach.* Pitman.

Giddens, A. (1999). *Runaway World: How Globalisation is Reshaping Our Lives.* Routledge.

Markiewicz, A. (2005, March/April). 'A balancing act': Resolving multiple stakeholder interests in program evaluation. *Evaluation Journal of Australasia, 4 (new series)*(1 & 2), 13-21.

Minyu, W., & Eweje, G. (2008). Stakeholder engagement as a facilitator of organizational learning. *Massey University. Department of Management and International Business Research Working Paper Series 2008*(1).

Nutt, P. C., & Backoff, R. W. (1992). *Strategic Management of Public and Third Sector Organizations: A Handbook for Leaders.* Jossey-Bass Inc Pub.

Reed, D. (1999). Stakeholder Management Theory: A Critical Perspective Theory. *Business Ethics Quarterly*, 453-483.

Schmeer, K. (2000). Stakeholder Analysis Guidelines. In *Policy Toolkit for Strengthening Healthcare Reform.* World Bank.

Scholl, H. J. (2001). Applying Stakeholder Theory to Government: Benefits and Limits. *1st IFIP Conference on ECommerce, E-Business and E-Government.* Zurich, Switzerland.

Sutherland, R., Joubert, M., Balacheff, N., Bottino, R., Fischer, F., Hoffmann, L., et al. (2009). *STELLAR Vision and Strategy Statement.* STELLAR Network of Excellence.

Svendsen, A. C., & Laberge, M. (2005). Convening Stakeholder Networks: A new Way of Thinking, Being and Engaging. *Journal of Corporate Citizenship*, 91-104.

Wild, F., & Ullmann, T. D. (2009). *Science 2.0 Mashups.* STELLAR Network of Excellence.

Wild, F., & Ullmann, T. D. (2010). The STELLAR Science 2.0 Mash-Up Infrastructure. *International Conference on Advanced Learning Technologies.* Sousse, Tunisia.

Windrum, C., Joubert, M., Barak, N., de Vries, F., Camilleri, A. F., Specht, M., et al. (2010). *Report on Community Building with Stakeholders.* STELLAR Network of Excellence.