DELIVERABLE 19 - CRITERIA FOR EXCELLENCE AND QUALITY (BENCHMARK STATEMENT)

Ed2.0Work - European network for the integration of Web2.0 in education and work

(Version 2)

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The Project "*Ed2.0Work*"

The "Ed2.0Work - European network for the integration of Web2.0 in education and work" project is a three year Education, Audiovisual & Culture Executive Agency co-financed project with the following aims:

- To support the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning.
- To encourage the best use of results, innovative products and processes and to exchange good practice in the fields covered by the Lifelong Learning Programme, in order to improve the quality of education and training.
- To promote European co-operation in fields covering two or more sub-programmes - KA3.
- European-wide stakeholders' communities promoting digital competence and other key transversal competences for life and employability.

More specifically, Ed2.0Work promotes innovation and best practice in the implementation of the use of Web2.0 technologies for teaching and learning in education and the workplace. Ed2.0Work aims to:

- form a Network of organizations where Web2.0 technologies are use efficiently and effectively in education and the workplace;
- form three *Special Interest Groups* (SIGs) to examine issues and offer guidance;
- establish means and methods for participants to share their experiences, products and expertise;
- create and accredit a network of *Centres of Excellence*, through which multipliers can be sought;
- produce a series of core publications on working with Web2.0 technologies in different contexts and disciplines;
- run a Web2.0-services portal for teachers, workplace trainers and teacher trainers;
- enhance value to existing best practice by widespread dissemination;

- further expand the network;
- establish a forum for sustainable development and growth.

In order to achieve this, it will:

- identify methods and approaches to teaching and learning with Web2.0 technologies;
- promote Web2.0 educational technologies, relating its use to key competences;
- collect, validate and widely disseminate the use of Web2.0 educational technologies;
- encourage teachers to use Web2.0 educational technologies and resources creatively.

To achieve these aims, Ed2.0Work will:

- undertake research and publish the “state of the art” in Web2.0 usage in education and workplace training;
- examine pedagogical approaches to the use of Web2.0 usage in education and workplace training;
- produce guidance resources for teachers and teacher educators;
- establish SIGs themed on resources, pedagogies, curriculum including and criteria for excellence and quality;
- create a Ed2.0Work website with Web2.0-services offering access to materials, an online community, a catalogue of training opportunities and Ed2.0Work products, research reports, resources etc.;
- disseminate Ed2.0Work and widen the community via the extended networks of partners

Introduction

Under the denominator of *social web* have been included the Web 2.0 services in which there is no difference between user and author: Social networks, wikis, blogs, YouTube,. ... This would therefore be the main distinguishing feature of these technologies, the novelty with respect to the website: in this case there is no personal mediation of computer specialists, or dependence on them. It is characterized by the fact that all services are participatory. Users of 2.0 technologies can experience simple, direct and open relationships with each other, share resources and communicate immediately and simultaneously. This fact in most cases, but not always, involves some degree of interaction.

The advent of Web 2.0 has generated a huge number of new resources that have initially the potential of enhancing participation, collaboration and customization of the Internet user. We no longer have in front of us a purely informative linear action, which did not allow the internet user to project their own interests. Now, however, it is possible to work on projects of shared knowledge, integrate a customized element in a web page and share it with others through the network, develop proposals under a collaborative model, etc. This new dimension, multiplies the possibilities of the Internet as an educational resource. Now we can not only find information, the teacher/trainer/instructor can now guide and also follow student participation, but the truth is that teachers need a digital literacy to enable them to acquire the technology potentiality for effective use of it in educational processes.

The idea of virtual learning environment has a clear relationship with nature and genesis of social learning, in this case favoured by technological means. Following Onrubia (2005) we can say that it is based on a set of devices and technological tools that allow the attendance of students, teachers and instructional resources that students develop their own knowledge. What students learn in a virtual environment is not simply a reproduction of what is presented as content to learn, but a reconstruction of that information, or that process, mediated by the cognitive background of the learner. It also involves an

elaboration because, with the help of the human elements of the environment, the student selects, organizes and gives a proper and meaningful nature (makes) the information contained in the environment.

As a result the Social Learning Environment (SLE), we can understand (Baird & Fisher, 2006) as a set of services in which there is no difference between author and user (Social Networking, wikis, blogs , YouTube, ...), where there is no personal mediation of computer specialists, or dependence on them. Characterized by being participatory and interactive, users, students and teachers can interact in a simple, direct and open with each other, share resources and communicate immediately and simultaneously. And that includes the possibility of the student to reconstruct and develop meaningful knowledge for him with the help of the human elements of the environment, from the information that is presented or available.

The term "social software" (blogs, wikis, social networking, etc.) is used in different fields, and as technology it has been developed outside the educational world. Terry Anderson (2005) introduced the concept of "social educational software" and argues that it consists of network tools which support and encourage individuals to learn, retaining individual control over their time, space, presence, activity, identity and relationship towards the learning process.

These tools are used to support e-learning covering a wide range of different applications. Traditionally such as discussion forums or chat, or integrated use, customizable and collaborative as file sharing, web conferencing, bulletin boards or shared, e-libraries, weblogs and wikis. These tools can be used to support different activities that help the learning process. The question is to decide theoretically organization for e-learning, especially in deciding the issue of integration versus separation. On one hand, it is possible, at least theoretically, the integration of different tools in one learning management system such as Blackboard or Moodle. On the other hand, tools can be separated into a number of independent distributed applications used for different purposes but within the teaching management system as defined learning initially.

Basic statements/guide on excellence and quality criteria when using Web2.0 tools and resources in educational and workplace training processes

There has been no much discussion within a pedagogical context on the use and organization of the Web2.0 tools in educational processes. The general principle that arises from the existing dialogue about the educational value of different tools is to focus on pedagogy as a starting point and that the usefulness of the different tools depends singularly and in each case, based on the learning activities that we want to support.

Among the many studies of factors that impact the use of technology for pedagogical transformation in formal education, common problems have materialized: the education processes, supported by new technologies, that could guide to innovation are not sufficient known to teachers/instructors/trainers, not enough esteemed, and are noticed by instructors as too demanding and problematical to be implemented in daily practice. Obstacles linked to disparities with school or institution culture and expectancies associated to what represents "quality" performance by mutually teachers and students are generally central (Berge, 1998). An additional obstacle is the awareness of technology as a "*solution in search of a problem*" in the formal education environment.

With the fast improvement of technology, it is puzzling for educators to safeguard that learning design methods remain current. Though, while the instruments are shifting at an ever- growing degree, the content and educational processes are in most cases quite stable. In order not to be beaten by the frequently varying educational technology scene, it is important to keep a focus on technology as a facilitator of interaction and collaboration and a channel of signifying content. By that, educators can focus on pedagogy and on students' needs, which are the fundamental structures of the educational design, without being excessively unfocused by the technology.

Quality and excellence in educational processes

Perception and ideas of quality are very important to the processes of education (for all agents implicated in the task). It is really a concept that can be interpreted and made operational from many diverse viewpoints and within a big margin of degrees. For example, in terms of procedures, connects to factors that influence transparency of requirements that affect students. Quality is also identified in terms of the degree of adequacy and suitability of the educational programs and courses in terms of benefits for the community and for the society in general. The concept also links to indices of success and attainment. It also it is connected with quality of learning materials and resources and curricula and the capacity and competencies of the instructors. Also includes the perspectives of the teachers of their own accomplishment: whatever impacts negatively on student replies to their courses disturbs the reciprocal feeling of the value of the course. On the other hand, in the case of students, the term often concerns to understandability and clearness on the expectations of the course and its learning pathway. Therefore there exists many mixtures of perceptions on quality in education. For a pedagogical approach based on making use of Web 2.0 tools in education, these perspectives need to meet at some point and to some degree. Three factors and perspectives will be examined: a) teaching quality, b) institutional quality, and c) technology quality.

Teaching quality

For Web 2.0 resources and procedures to suit embedded in typical educational practice, these tools and its potential must be seen as producing an added value and quality to instructional processes. This view and perspective includes numerous aspects, comprising pedagogical factors, teaching integration and support, and evaluation. Inspiring all of these are the values of teaching and learning that teachers and students bring with them into the educational scenarios. Regarding this inspirational points of view Sfard (1998) identified two descriptions of teaching and learning which exemplify two different approaches: a) the acquisition approach and b) the participation approach. Excellence and

quality from an acquisition angle places focuses and emphasizes how efficiently and successfully learning materials are prepared or chosen, communicated, explicated, and clarified (if needed). The importance for this quality approach rests partly on the materials and resources that are used for studying selected to support acquisition, and partly on the instruction skill of the teacher. Basic aspects of an acquisition perspective to learning comprise knowledge, data, concepts, and achievement. Quality is verified, in this case, to the extent to which students positively respond to examination questions at the end of the course. The participation point of view, in contrast, places the characteristics of the learning process in belonging, contributing, collaborating, being and acting as a member of a community; student has clearly a more active and proactive role in all the educational process (teaching and learning).

It is quite clear that the acquisition perspective of quality in education is predominant in practice if compared to the participation perspective. This fact permits us to identify a first risk to the acceptance of Web 2.0 resources and potentiality in education as the usage of such processes in education align with a participation perspective rather than an acquisition one. Web 2.0 it is clear a philosophy and a set of tools that merges perfectly with the participation approach of education. Educational perspectives are articulated in instructional practice by the pedagogies used in the curriculum setting. Many pedagogies could be described as participatory pedagogies in which "*methods of instruction are not only tools for acquiring skills; they are also practices in which students learn to participate*" (McLoughlin & Oliver, 1998, p.39). A subcategory of these participatory instructions concentrates on methods in which the learner is implicated in the contribution of some of the learning means in a course or in the design of certain phases of the course in which participates. These may be labelled as participatory design actions in which learners take the leading role in planning some of the course objects (Pieters, 2004). Learners in this case are co-designers of the pedagogy which is built on theories of constructivism, moving from exposition to discovery learning, from instructional control of the design by the teacher to an increase of the learner control of the processes.

Occasionally, though, this “way-of-doing” does not match with students expectations. The students’ perception of course quality, many cases, was different from that of those who designed the course. Quality, as seen in success in obtaining an expected outcome, means that consistency among all aspects of an activity system needs to be achieved. When there are differences between them, the outcome of the system won’t be as anticipated. New forms of assistance are needed for students when contribution-oriented pedagogies are incorporated into instructional practices. Pieters (2004) remarks the types of sustenance that learners need in designing learning processes: help regarding practical rather than declarative information, support for motivation for the task, and for have some system of prevention of cognitive excess.

Amongst the motives that evaluation is the major challenge in a contribution-oriented pedagogical method is that by description, there are no pre-determined “right” answers, but in its place there will be diverse degrees of suitability on diverse dimensions. Students are, reasonably, very considerate to potential uncertainties in grading and marking. The more open-ended or complicated the contribution, the more divergence can develop around the grade.

Briefly, it won’t be simple to embed Web 2.0 tools and methods within conventional education practice. To enlarge the likelihood of this implanting, the following factors and characteristics need to be in place:

- Both teachers/instructors/teachers and students must worth an educational approach where learner contribution and role are balanced with achievement.
- A pedagogical method that reproduces contribution-oriented activities where students generate at least some of their own learning means.
- The approach must be supported and based in practice by joined support resources for both teachers and students. Uncertainty must be condensed as much as possible for the learners regarding what is expected from them, and to what degree.
- The products and the processes created by the students should be assessed as part of overall course evaluation practices.

The third and fourth of these suggestions are feasible in practice but require considerable additional work for the instructor compared to conventional educational practices. The second of the proposals necessitates some imagination, particularly to interpret the possibilities of Web 2.0 resources to significant learning activities. This cultural transformation of the education institutions is not feasible to happen on its own, at least in a short-term. The general curriculum and society's viewpoints on quality might have to change first. There are explicit teaching outcomes, clear criteria and where possible, statements of the various levels of achievement. Under teaching quality, the main criteria for the excellence and who and what should be aimed are the following ones:

1) Both teachers/instructors and students must worth an educational approach where learner contribution and role are balanced with achievement (criteria aimed at the Departments).
2) A pedagogical method that reproduces contribution-oriented activities where students generate at least some of their own learning means (associated with the courses and modules).
3) The approach must be supported and based in practice by joined support resources for both teachers and students. Uncertainty must be condensed as much as possible for the learners regarding what is expected from them, and to what degree (associated with the courses and modules).
4) The products and the processes created by the students should be assessed as part of overall course evaluation practices (associated with the courses and modules).
5) It should be a close match between the teaching tasks – in particular, the knowledge and skills that these tasks are capable of determining – and the intended learning outcomes (associated with the curriculum development).
6) It should be a close match between the teaching tasks – in particular, the knowledge and skills of the tasks are capable of determining and the

affordances of the Web 2.0 tools and resources (associated with the curriculum development).

7) The learning obtained (and other information provided to students on their achievement) as result or teaching tasks can make a direct link between the intended learning outcomes and students' ability to use the Web 2.0 tools and resources (associated with the curriculum development).

Institutional quality

There are minimum four, theoretically conflicting, perceptions on quality from the institutional viewpoint that can influence the acceptance of Web 2.0 resources and methods in educational practices. These perceptions relate to curriculum frameworks, beliefs from external stakeholders, quality interests relating to learning resources and experiences permitted by the institution, and subjects involving intellectual property. Any move towards a pedagogy supported by Web 2.0 technology must be checked within the quality assurance viewpoints and also having into consideration the curriculum. Quality assurance practices give precise and important attention to the institution's measures for student assessment.

There are external stakeholders whose opinions on quality affect the institution's answer to pedagogical and technical transformation. Opinion leaders and professional communities are often present in media suggesting that education institutions should transform, and use technology in this change.

A final issue involving quality from the institutional side focuses on ownership and intellectual property. The line between suitable reuse of another's contribution and plagiarism will oblige an organization-wide policy as well as models for practice. Institutions are questioned on the quality and legality of learner-produced resources. Therefore, from an institutional viewpoint the motivation of Web 2.0 tools and processes may:

- Conflict with the distinctive conservatism of the curriculum
- Generate complicated challenges regarding to copyright and intellectual property

- Sometimes might be understood as a reduction in the quality provided by the educational institution

Also it could likewise:

- Be utilized as a strategy to reply to the vision and requests of key external stakeholders

The main criteria for the excellence under institutional quality and who and what should be aimed are:

1) Generate an approach to embed Web 2.0 tools and methods within course learning activities by offering support for teachers (associated with the courses).
2) Stimulate an atmosphere in which digitally literate learners are motivated and encouraged in their use of Web 2.0 resources and methods (aimed at the institutions).
3) Organize one resource environment in which the appropriate Web 2.0 tools and resources are available (aimed at the institutions).
4) Generate institutional measures for use and reuse of learning resources (aimed at learners and teachers/instructors).
5) Proper use of the Web 2.0 tools and resources for the learners, avoiding that, during the learning tasks, there are copyright-related confrontations (aimed at the teachers/instructors).

In summary, education institutions need to conceptually transform their perspectives and considerate their positions as institutions of learning within the 21st century. They will be forced to react to the growing body of personalised, devices, which will permit users to retrieve content in contexts which were previously impossible. This will require switching not only how content is distributed to such tools, which may be distributed across existing networks and locations but also how students cooperate, support and shares this content within their communities and for their own needs.

Technological quality

While it could give the impression that a technology perspective on quality would be most directly associated with the use of Web 2.0 resources and processes, the technology structure, in an average education institution, may be a major obstacle to implementation and use of Web 2.0. Virtual Learning Environments (VLE) or "*course management systems*" have penetrated in a very general and profound way into mainstream use in education organizations but typically those systems prohibit or make extremely difficult the possibility of teachers and students using Web 2.0 processes such as building on and extending each other's contributions and experiences. Institutional Technological policies, in many cases, may forbid students from accessing to their own work after a course has finished. Learning means produced for audiences outside of the curriculum, must be accommodated outside of the VLEs, causing technical questions in terms of management and quality assurance. Apart from that, emerging Web2.0 resources and systems won't be exactly integrated into existing IT techniques for institutional IT management processes; if available, even using an Open Source VLE, substantial time will pass between initiating attempts at usage and eventual institution-wide encouragement. Students need a well-organized learning environment, in which the opportunities of the course and suitable support resources are accessible. They also need groupware instruments, as shared workspaces; instruments for document version control and shared edition, feedback, and making notes; resources that permit them to manage their own work-in-progress and also prepare work for assessment accessible to peer reviewers and teachers before going public. They require resources to manage their shared agendas and for diverse forms of communication. They need skills in communication supported by a web environment.

If Web 2.0 resources and processes become integrated in formal education instructional processes, these requirements will multiply and place strain on the

Technological infrastructure and support. An added issue is the gap between the practice and skills of students and instructors with regard to Web 2.0 tools and processes. While students can teach themselves to be complex and expert users and members of communities making use of Web 2.0 tools, instructors are likely to need help in acquiring skills and competencies to use the tools or even in becoming familiar with them. IT services may be essential to support instructors in a new impulse of “computer literacy”, this time focused on the Web 2.0.

The main criteria from the excellence under technical perspective on quality and who and what should be aimed are the following ones:

1) Guarantee the VLE supported by the institution, can help as support rather than an obstacle to *contribution-oriented* learning actions and pedagogies (aimed at the teachers/instructors and the institutions).
2) Detect and perceive student use of Web 2.0 resources and processes to identify possible usability difficulties and offer support to overcome these difficulties (aimed at the teachers/instructors).
3) Support teachers/instructors in the use and management of some major Web 2.0 tools suitable for support of instructional activities, for example e-portfolio platforms; Wikis; Weblogs; tools to edit podcasts, image, video, and audio content and social software for collaborative bookmarking and authoring (aimed at the teachers/instructors and associated with the curriculum development).
4) Domain by the teachers/instructors of the Web 2.0 methods, resources and tools, so that they are sophisticated users in supporting the learning processes (aimed at the teachers/instructors and associated with the curriculum development) .
5) Have an adequate technology infrastructure for the use of the tools and Web 2.0 resources related to these technologies (aimed at the institutions).

Colophon

As we have been describing, many factors have an effect on the perception of quality in education. When the focus of the quality of the use of Web 2.0 tools and implementation processes, it can be expected that conflicts in quality opinions, even from those representing a single agents group (teachers, learners, administrators), will generate barriers to fruitful application. The rapid penetration and general acceptance of Web 2.0 tools and dynamism in general terms in the society at large cannot be used when predicting a similar penetration, acceptance and usage in formal learning practices in education settings. Because of the many disparities in quality perspectives, as well as the problems in carrying out new innovative pedagogies in education scenarios and realities, it could, sadly, be foreseen that the empowerment offered by Web 2.0 resources and processes won't be able to overtake the inertia in the education institutions when it comes to the mainstream acceptance and penetration of new possibilities and views of learning eased by new technologies resources. Furthermore, it should not be the *technology variable* the one that drives change or excellence and quality perspectives in education. However, alterations in society are interrelated with technology, and consequently technology use specific societal and personal needs to be significant in institutional quality perspectives. The many different types of interaction, representation and collaboration resources jointly referred as Web 2.0 that are now being used by learners of all ages and levels outside of formal education requirements are transforming such fast inroads since they facilitate operative ways to connect, to be heard, to build an identity, to find and share. This sort of empowerment needs to be considered within education, if not the disassociation of "school" from the "real world" will be expanded. By planning and leadership can some solutions to this risk can be acted upon in the educational institutions by all educational actors and agents. But most essentially, a mind-set transformation is needed. As an initial step, organizations can motivate this if participatory pedagogies and the

efficient and successful use of technology for co-designing, contributing, collaboration and learning from others (taking as “others” all actors involved in the educational and training processes) are stipulated and defined as quality standards for internal and external learning assurance practices.

Resources and bibliography on the topic of quality and excellence on implementation of Web2.0 in educational processes

Below you will find a selection of literature on the topic discussed in the present document.

Reference	Summary
Ulf Daniel Ehlers, (2009). Web 2.0 – e-learning 2.0 – quality 2.0? Quality for new learning cultures. *Quality Assurance in Education*, 17 (3), pp.296 – 314.	*Purpose* – The purpose of this paper is to analyse the changes taking place when learning moves from a transmissive learning model to a collaborative and reflective learning model and proposes consequences for quality development. *Design/methodology/approach* – The paper summarises relevant research in the field of e-learning to outline the differences between e-learning 1.0 and e-learning 2.0 and amalgamates it with a series of previously published works. The characteristics of quality development are analyses in a next step and suitable methodologies for developing quality for e-learning 2.0 environments are selected, proposed and explained. *Findings* – Even though the question of quality is controversially discussed already when e-learning 1.0 appeared on the market, e-learning 2.0 creates even more insecurity. This paper aims at answering the following

	questions: what constitutes the new, innovative element, which is described by Web 2.0 and e-learning 2.0? Does this development have consequences for how it assures, manage and develop quality in e-learning? In three steps, it is described what e-learning 2.0 constitutes, which basic elements of Web 2.0 it builds on, and what has changed. In a second, step the consequences this implies for quality development in e-learning are discussed. Third, a number of methods as examples and practical advice on how to further advance quality development are described. *Originality/value* – The original value of the paper is to outline the changes which have to be taken into account in new and innovative learning environment which are build on Web 2.0 technologies and to draw consequences for quality development as well as suggest methodologies for educators and learners to improve quality of such learning environments.
Hirumi, Atsusi (2005). In Search of Quality: An Analysis of e-Learning Guidelines and Specifications. *Quarterly Review of Distance Education*, 6(4), pp. 309-329	Educational institutions across the country are adopting guidelines to help assure the quality of e-learning programs and courses. Corporations are also adopting guidelines, but their focus is on the interoperability and reusability of learning objects. While there are commonalities, there are also significant differences between how education and industry view quality and approach e-learning. This article analyzes education guidelines and industry specifications for e-learning published by professional organizations. Key factors within, as well as across both approaches are identified and discussed to inform those considering the adoption of standards and the

	establishment of a quality assurance system for e-learning.
Gray, K., Thompson, C., Sheard, J., Clerehan, R. and Hamilton, M. (2010). Students as Web 2.0 authors: Implications for assessment design and conduct. *Australasian Journal of Educational Technology*, 26(1), 105-122	Students now have at their disposal a range of Web 2.0 authoring forms such as audio and video podcasting, blogging, social bookmarking, social networking, virtual world activities and wiki writing. Many university educators are interested in enabling students to demonstrate their learning by creating content in these forms. However, the design and conduct of assessment for such student-created content is not straightforward. Based upon a review of current literature and examples in the public domain, this paper identifies key challenges for academic assessment that arise from students' use of Web 2.0 authoring forms. We describe and analyse selected cases where academics have set assessable student Web 2.0 activities in a range of fields of study, noting especially the inter-relationship of learning objectives, assessment tasks and marking criteria. We make recommendations for practice, research and understanding to strengthen educational quality and academic integrity in the use of Web 2.0 authoring forms for assessable student learning.
Orehovacki, T. (2010). *Proposal for a set of quality attributes relevant for Web 2.0 application success*. In: Information Technology Interfaces (ITI), 32nd International Conference, pp. 319 – 326.	Quality and usability of Web applications are considered to be key aspects of their success. If these aspects are not adequately represented in a Web application, or if they are not appropriately combined, there will be little to prevent the users from browsing further in search of an application that will more effectively satisfy their needs. However, the main challenge is to identify key attributes that will retain users on a Web application longer or

	influence their decision to visit it again. There are many frameworks and methodologies that deal with this issue but very few of them have an emphasis on assessing the quality and usability of Web 2.0 applications. This paper contains a critical review of previous research in the field of Web quality assessment. It provides the theoretical basis for the development of a set of attributes that should be considered when measuring the quality of Web 2.0 applications.
Valère Awouters & Katja Bongaerts (2007). *The WEB 2.0 and Social Software related to the quality-assurance role of E-portfolios.* In: Conference ICBL2007.	The use of the digital portfolio as an instrument for life-long learning is generally accepted also in regular higher education. The use of a Personal and Professional Development Plan (PPDP) increases the quality of e-portfolios significantly. However since 2006 the internet was personalized by the increased use of collaborative writing tools as weblogs, wikis, ... This offers a lot of possibilities for learners in an informal way. Formal learning will have to take into account this evolution. The e-portfolio will have to be redesigned to integrate both formal and informal learning for students and lifelong learners. 360° assessment of learners can generate an answer to the way teachers and lecturers have to deal with this new situation.
Moser, T, & Swheneey, M. (2012). A Model Of Problem Based Learning To Support Excellence In Evidence Based Arguments Through Leveraging Of Web 2.0 Tools. In: SAM International Business Conference	The development of problem-based learning environments to support critical thinking skills at the highest level of Bloom's taxonomy is important to the creation of evidence-based arguments. Student's ability to create evidence-based arguments increases their professional viability and value. This exploratory study addresses the viability of a problem based learning model through the

	incorporation of Web2.0 tools in the strategic management and policy capstone course. This multidisciplinary research explores leveraging of Web2.0 tools, outlines the impact on management pedagogy, and student perceptions of learning to create an environment that supports excellence in the development of evidence based arguments. Grounded theory provides the framework for continual analysis and analytical writing about the data collected from three semesters of surveys related to the use of the technology in the course and the perception of learning outcomes.
Law, S. (2011). *Recognising excellence in teaching and learning*. Higher Education Academy.	Learning and teaching are at the heart of higher education. Since 2006 academics and other staff who support student learning have been able to benchmark their professional development against the UK Professional Standards Framework (UKPSF), a national framework owned by the sector and developed and managed on its behalf by the Higher Education Academy. The descriptors in the framework give confidence that people with a critical job to do, supporting students in their higher education, are prepared appropriately at each stage in their career. The strengthened framework comes at a time when the expectations on teaching in higher education are greater than ever before. The Higher Education Academy appreciates the time and care that colleagues in the sector have put into updating the UKPSF. It provides a solid basis for the development of excellent teaching in higher education.

Attwell, G. (2010). Can Web 2.0 and Social Software Help Transform How We Measure Quality in Teaching, Learning, and Research?. In Changing Cultures in Higher Education (pp. 433-446). Springer Berlin Heidelberg.	This paper focuses on the issue of quality in teaching, learning, and research. In the second section, the paper looks at the different ways technology is being used to learn and at the changing expectations of learners leading to pressures for transformations in both pedagogy and institutional structures. The third section proposes a new rhizomatic model of learning. The following section "Quality Frameworks: Perception and Reality" suggests that traditional measures of the quality of teaching, learning, and research have been hijacked by the commodification of education. This is explored further in Section "The Commodification of Education and Its Impact on How We Measure Quality". Section "How will Web 2.0 and Social Software Change our Understandings and Measurement of Quality?" looks at how Web 2.0 and social software can provide opportunities of new ways of measuring the quality of learning through embedding quality measures within the processes of teaching and learning and knowledge development. Sections "What is the Purpose of Traditional Assessment Measures?" and "Critiques of Assessment Processes" provide a critique of traditional assessment processes and suggest the need to move from the assessment of learning to assessment for learning. Section "Personal Learning Environments and Assessment for Learning Through Authentic Learning Tasks" looks at how personal learning environment can be used to support authentic learning and assessment for learning. The conclusion suggests that the development of new quality processes will require fundamental rethinking

	of the purpose and role of universities.
Leask, M. (2010). Improving the professional knowledge base for education: Using knowledge management (KM) and Web 2.0 tools*. Journal for Policy Futures.*	Improving education systems is an elusive goal. Despite considerable investment, international studies such as the OECD Teaching and Learning International Survey (TALIS) project and the McKinsey Report How the world's best performing schools come out on top indicate that improving teacher quality is more important than increased financial investment. Both reports challenge governments, academics and practitioners to adopt new ways of sharing and building knowledge. This paper makes the case for national education systems to adopt tried and tested knowledge management and Web2.0 tools used by other sectors and highlights the neglected potential of teacher educators as agents for improvement.
Elton, L. (1998) Dimensions of excellence in university teaching, *International Journal for Academic Development*, 3:1, 3-11	The paper analyses the concept of 'teaching excellence' and attempts to give it precision. In the process, it is found that the lack of precision is due essentially to the multidimensionality of the concept, which has led to serious confusion in any attempt to reduce its dimensions to a single one. The dimensions are of two kinds; first, classificatory, distinguishing the three levels of institution, department and individual, and second, substantive, describing the different ways in which each of the three levels can exhibit excellence. Ways of recognizing and rewarding individual excellence in its different dimensions are then discussed and recommendations are made for action. It is argued that under present circumstances, excellence at institutional and departmental levels are almost unattainable, but that this is

	not so at individual level. Finally, it is noteworthy that recognizing and rewarding teaching excellence at all three levels is found to be significantly different from corresponding practices normally used for research.
Mathiasen, H., & Schrum, L. (2008). *Web 2.0 and social software: Challenges and complexity of communication in education*. In HCI and Usability for Education and Work (pp. 97-112). Springer Berlin Heidelberg.	This paper begins with an exploration of the changes that new Web tools and social software have fostered in communication in educational settings. It uses the framework of Luhmann to examine the complexity of these changes, and the potential to promote student centered learning. Through three case studies of student projects, the initial examination of an evolving educational investigation, results demonstrate the challenge for teachers to take on new roles, the reality that students' learning styles continue to drive their preferences, and the need for all teachers to understand more fully the possibilities and potential these tools offer for some students. The paper ends with a call for further research in this area.

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