Collaborative Learning Technologies

Category	Description	Examples and Applications	Collaborative Learning Activities	Issues
1. Social bookmarking	• Sharing personal collections of URLs on a web-based server • Ability to reuse and re-purpose existing collections of links • Tagging of resources helps develop relationships between concepts and people	***Examples*** • Social Bookmarking in Plain English • 7 Things you Should Know about Social Bookmarking ***Applications*** • Del.icio.us • CiteUlike • Diigo • The Library Thing • Xmarks • StumbleUpon	• Course reading list • Article critique assignments • Group project resources • Different resources and tools • Ability to connect with different communities • Compare and contrast in classroom • Student go out and comment on peers findings • RSS feeds • Being collaborate • Adding to relevance of course • Student generated reading list	• How to organize the resources? • Different communities have different perceptions about content • Learning curve to use the tools • Using the tool in a single course versus a program focus • Why bother with citations? (connotea) • Issue of dead links

2. Blogs	• A Web-based public diary with dated entries, usually by a single author, often accompanied by links to other blogs that the author of the site visits on a regular basis (Downes, 2004). • Reflective writing and reading activity • Opportunity for students to receive external feedback and to make contributions to the dialogue in their field of study • RSS subscription to other blogs to receive automated content updates	***Examples*** • Article Critique and Peer Review • Assignment Reflections • Video Blogging • Teaching with Twitter ***Applications*** • Google's Blogger • Edublogs • Twitter	• Article critiques • Peer review • Assignment self-reflections • Field journal • Practicum/clinical journal • Citizen journalism • Historical blog - diary of historical events • Blogging portfolios • Learn through reading other people's blogs (different perspectives) • Share questions and have other people comment and provide solutions • Microblogging (i.e. Twitter) to begin the process • 15 tapes in 15 weeks • Audio tapes to Wordpress • Research lab community for students and post-docs sharing a blogger.com • Critique articles and then authors read and critique student critiques	• Public or private in a management system • Security around sensitive knowledge (i.e. company and patient information) • Orientation to using an academic blog • Question about the timing of the blog - single course versus a program blog • Student ICT analysis - comfort level with using blogs • Importance of properly citing sources of information and using concept terminology correctly • Only a few students reply to postings on the blogs of others (i.e., teachers, peers)

3. Wikis	• A wiki is a collection of Web pages that can be edited by anyone, at any time, from anywhere. The possibilities for using wikis as a platform for collaborative projects are limited only by one's imagination and time. (Leuf & Cunningham, 2001) • Support collaborative and creative project-based work	***Examples*** • Wikiversity • WikiEducator • Other examples • Wikipedia Related Assignments ***Applications*** • DokuWiki • Wikispaces • Pbwiki • Google Docs	• Class books • Online discussion summaries • Group essays • Student essays • Peer review of student work • Course planning • Research activities • Networking • Expand in a limitless way - label and links • Personal and course home pages • Purely collaborative • Track contributions easier than a blog • Assigned research • Version control • Faculty development tool • Help connect learning between classes and courses in a program	• Require more than a wiki (e.g. discussion outside of a wiki) • Potential to integrate a wiki tool within Moodle • Manage and communicate with students • Clumsy to use (i.e. registration, formatting tools, wiki mark up language) • Issues with wiki providers - ease of use versus number of features • Advertisements on "free" tools • Strange terminology associated with this wiki • Who is responsible for the validity of the content? • Ownership, facilitation and coordination (needs at least one person if not a group)

4. Social networking systems	• Focuses on building and verifying of online social networks for communities of people who share interests and activities • Additional "communication channel" to reach students (i.e. RSS feeds from institutional learning management systems)	***Examples*** MACUL Space Michigan Association of Computer Users in Education is the Michigan branch of ISTE (International Society of Teaching in Education). We use this Ning to share problems, solutions, cool sites and discuss emerging technologies and their applications. Members can join sub groups for specific conversations. Several classes from Wayne State and Michigan State Universities have also set up groups as a bridge between practicing K12 teachers and their students in Education and Instructional Design & Technology programs. Using Ning in Education ***Applications*** • Facebook • MySpace • Friendster • Bebo • Ning • LinkedIn	• Online discussion board • Study groups • Course communication Facebook • Easy to use - almost all the students have accounts (no orientation requirements) • Low bandwidth connection - easy to access in remote and rural areas • Connections between institutions in other countries • Useful for linking students and employers - information board (i.e. events) • Class groups Ning • Potential to use for academic purposes - conferences Other • Twitter (medical operation where students they could ask another doctor questions about surgery) • Students connect beyond academic community (beyond limits of LMS) • Stay involved in larger community	• Limited educational information on Facebook (i.e. Brittany Spears Group) • Privacy issues • Cyberbullying • Sensitive information • Trying the tools before using in class in a faculty sandbox area • No separation of personal workplace and academic identities • Warn students about liability issues (privacy, and facebooking sites)

5. Social media	• Simplify the process of posting and sharing content on the Web (i.e. text, audio, images and video) • Provide a wealth of re-usable media resources for learners and educators	***Examples*** • MERLOT • Podcasts.com • NPR Podcasts • NASA eClips ***Applications*** • Podomatic • Flickr • YouTube • Slideshare • Go! Animate • Soft Chalk • Blip.tv • Jing • Camtasia • Raptivity • Voicethread	• Interviews with external experts • Case studies • Storytelling • Project work • Sharing of instructional resources • Discussions and debates about these learning objects • Easy to highlight importance concepts and ideas by using these forms of media • Introduction to topics • Enriching lectures • Using YouTube to introduce your country or region to International students • Flip camera/video capture	• Overwhelming amount of information • Incorrect information • Issues of plagiarism (students copying material into papers and presentations as their own) • Clear plagiarism policies and signed documents from students • Credibility and validity of information • Time consuming to find valuable resources • Distractions - inappropriate chat messages and material • Important of "tagging" resources - easy to find and reuse • Privacy • Copyright • Privacy of students' work • Reliability and issues of using 3rd party commercial servers to host academic course content • Searchability

6. Mashups	• Allow non-technical individuals to mix-up data, find new meaning and present it in interesting ways • Allow users to put together different types of data • Mapping mashups – maps are overlaid with different types of information • Music mashups – mixing tracks from two or more different source songs	***Examples*** • Digital Storytelling • Picture Mashup • Mapping Mashup • Health Mashup ***Applications*** • IBMs Many Eyes • Intel's Mash Maker • MIT's Piggy Bank • Quintura • Visuwords • Wordle • Inanimatealice • Yahoo Pipes	• Mapping activities - historical maps • Data visualization • Presenting student project and research work • Language teaching - comparing language use through historical times • Teaching a foreign language • Semantic web of anthologies using different forms of data (i.e. audio, video, images) • Knowledge maps • Opportunity for immense creativity from different parts and sources - new works of art • Swine Flu Google Map • Programs for Content Analysis • Analysis of online discussions using Wordle • Real-time analysis • Digital storytelling - Ianimate Alice	• Copyright issues • Content bound - need to be extremely knowledgable of the content - content expertise)

7. Web Conferencing Tools	• Synchronous communication opportunities (i.e. text messaging, audio, video) • Support 'real-time' collaborative and creative project-based work	***Examples*** • Educational uses of synchronous communication tools ***Applications*** • Skype • WiZiQ • Dimdim • Elluminate vRoom • Meebo • Twitter • Adobe Connect Pro • Mobile Phones (i.e. Nokia) • Yugma (desktop sharing application for Skype) • ooVoo	• External guest presentations • Group project work • Brainstorming and action plans - different forms of communication (text and audio chat) • Ability to practice online presentations • Ability to create learning resources • Browse and comment on YouTube videos • Annotate video clips • Live lectures (why) • Team projects • Service learning	• Bandwidth • Limitation of files that can be uploaded to mobile devices - cost as well • Screen size of mobile device • Issue of Connect Pro - more than 10 people - limited interaction - important to have plans for interaction - group activities

8. Virtual worlds and gaming	• Synchronous interaction in 3D immersive worlds • Support collaborative and creative project-based work that goes beyond text-based and audio communication	***Examples*** • Educational Uses of Second Life • Second Life Educational Wiki ***Applications*** • Second Life • Teen Second Life • Croquet • The Palace • Moove • Habbo	• Experimentation • Simulations • Group project work • Practice area for students (i.e. restaurant case, travel case • work skills, construction skills) • Learning different languages and cultures • - immediate feedback • Avatar - good ability for an icebreaker - encourage for everyone to speak • Collaboration between institutions and international partners • Visualize the process • Mentors • Simulations • Real estate appraisals • Artificial world where you can safely experiment and try different things • Plays/theater in virtual worlds • Identity • Examples from UW-Milwaukee	• Bandwidth and equipment issues • Time zone issues between international countries • Steep learning curve • A lot of technical support required
9. Other	eportfolio	KEEP toolkit	The KEEP Toolkit is a project of the Knowledge Media Lab at the Carnegie Foundation for the Advancement of Teaching.	