onCourse User Scenarios

1. Whole Class Teaching.

Reisa is an 1st grade teacher at the Miner Elementary School in State College, Pennsylvania. It is the end of the school day and she is looking for materials to help her illustrate a whole class lesson on vowels, she turns to onCourse for inspiration. As she logs on to the onCourse service she is immediately greeted by the service and has information relevant to her teaching assignment available to her. The onCourse digital collection that Reisa sees has been co-branded with her local public TV station (WPSX). The school district in which Reisa works has full on Course membership, so her profile sets a number of filters in the Search & Discovery systems, principally those of representing the Pennsylvania state standards of learning for her students ages. The Discovery system is important to Reisa, because although she knows the subject and learning objectives she wishes to present to the class, she is short of new materials to use. The Discovery systems allows her to browse across a number of subject and educational taxonomies to find materials that she hadn't previously thought to use, or even having been aware of their availability.

The onCourse Search & Discovery systems are based on the unique ThinkMap technology developed by Plumb Design. The ThinkMap allows users to browse across multi faceted taxonomies such as those represented by the onCoure multiple Metadata schemes. The results are displayed in a highly visual and intuative manner and users can freely adapt the discovery critera as they explore the onCourse Digital collection.

After a cursory search, Reisa finds a whole range of short videos, text and audio, even teaching notes and best practice professional guides relating to her subject. She previews the materials on her computer, where they appear in low resolution (i.e. web style video that everybody has got used to on the Internet). She can even search video clips by using 'free text', a facility that searches for the occurrence of words throughout the clip, and so find useful materials that may not be formally classified as relevant to the subject she is interested in. While she explores the digital collection, Reisa is selecting materials and adding them to her lesson basket. Satisfied with them, she signs off and goes home.

Users explore the onCourrse Digital Collection via low bandwidth connections to the Internet. They view low resolution proxies of the content on their own PCs. The XpressLearning tool set includes a special intelligent PVR-(Personal Video Recorder – e.g. Tivo) style client that tracks the requests for materials made by the users. The onCourse Learning Server receives the entire onCourse content carousel as it is broadcast. When the files that have been requested arrive on the carousel, the onCourse Learning Server records them to it's hard disc for later use.

The onCourse content carousel continuosly streams the complete contents of the Digital Collection sequentialy, from beginning to end. Because onCourse delievers video at 300Kbsec and the delivery system offers several Mbsec the complete carousel repeats itself many times a day. Because of this, users receive their selected materials very quickly.

Within a matter of hours the materials Reisa requested through her selection process have been delivered to her school's onCourse Learning Server. On her return to her classroom. Reisa uses her onCourse XpressLearning tools on her computer to access and organize her materials for use in her classroom. Reisa builds a lesson plan for herself by organizing individual content into the order in which she expects to use them. She is quite pleased with the lesson she has created and recalls that Miner Elementary's Lead Teacher has asked staff to make a concerted effort to share their original lesson plans within the building. Reisa opens the shared Lesson Pool Folder and adds her plan to it. All of her colleagues throughout the school using the onCoruse Lesson Pool will automatically receive Reisas' when they next sign on to onCourses' XpressLearning.

Reisa connects her computer to the classroom LCD projection system and awaits the arrival of her students. The core of the XpressLearning tool set is the Groove Networks Peer-to-Peer shared workspace. It is an Internet collaboration software client for extending group interaction, projects, lessons, meeting, seminars and tutorials across technical and organizational boundaries.

The XpressLearning verison utilizes decentralized network connections to deliver in-context educational interactions and productivity. The communication elements and online/offline usability enable real-time organised and ad-hoc educational collaboration in an easily adaptable environment that can be extended according to educational needs.

2. Self Directed Group Work.

Kimberly is an eighth grade teacher at the Jackson Creek Middle School in Lexington, KY. She is concerned about several of the students in her 3rd and 4th period classes who are having difficulty with some of the scientific exploration theories associated with transitional states of matter. During her lunch break she logs into onCourse to try and find something that she can use to develop a new approach for helping these students. Upon entering the service, Kim recognizes the KET cobrand and sees a recommended list of science programs upcoming on the channel. She knows what she needs for these students and conducts very specific searches for materials focusing on dealing with the changes in matter from gas to liquid to solids.. She finds a series of activity sheets and with it, a very clear explanatory video clip. There is also a software file that she will use to offer her pupils a range of exercises and drills. Kim selects these items, sits back and takes a sip of her latte (with an extra shot of esspresso.

Later that day, Kim's materials are waiting for her, on the school' onCourse Learning Server. Using XpressLearning, she sets up a 'shared work space' for the students that she is concerned about, and assigns an account for each student. Then she uses the 'course builder' to organize the materials and add her own instructions, activity sheets and simple multi-choice tests. She puts her 'mini course' into the groups shared workspace from her computer.

The XpressLearnimng workspace hosts a number of organisation tools including a course building application. This enables teachers to build whole class lessons and individual purpose designed courses for groups and individuals. Teachers can se up dedicated shared workspaces and make them only available to the pupils they specify. Each space can be populated with a range of materials and tools for the pupils to use

3. Professional Development.

David is a High school teacher at the Science and Technology Magnet school in Scotts Bluff, Nebraska. He has just arrived home and is preparing a lesson designed to introduce difficult concepts surrounding the topic of energy, He is keen to try some 'problem solving' activities with his class, believing that this will stimulate some interesting classroom discussion and investigation. He signs on to onCourse from his home computer, and just like the others, enters the Digital Collection through the familiar co-branded site with Nebraska Educational Television. He knows the subject area but is not familiar with the types of materials best suited to problem solving and the development of 'thinking skills'. He selects the 'educational philosophy' filters for conducting his search to 'thinking skills' and begins to browse for materials associated with Energy. He has soon collected materials from several popular public television programs and a range of Public Affairs programs that NET has recently done that deal with the environmental impact of the Yucca Mountain nuclear storage facility as waste is transported across Nebraska. There are also some interesting documentary pieces showing what it is like for ordinary people living in Northern Cyprus, without electricity. Deciding that this is just what he needs he selects these resources. While he is browsing for materials intended for his students, he notices a professional development seminar on the use of thinking skills in science education. He adds his name to the list of attendees, logs off, and prepares to go running. Jogging along the river front he decides to get to school a little earlier so that he can retrieve the Energy materials from the school on Course Learning Server and organize them for a class presentation coming up this week.

Later that evening, David logs back onto his computer and enters the XpressLearning tools. To his surprise, a new shared workspace appears entitled, Thinking Skills Seminar. It contains a calendar detailing all the online group meetings, audio tutorials and lectures. He sees he has already been assigned to a tutor group, and several of his tutor group members are also online; two have already sent him instant message

XpressLearning offers a range of instant text communication tools. These include instant messaging,

the course starts in two days time. David quickly	
sets his status to 'Do Not Disturb' and briefly	
reviews the background files that populate the	
discussion space. This is going to get very	
interesting, he muses as he leans back and turns	
of his computer	

4. Remote Tutorage.

Johanna, a 4th Grade teacher in Phillips
Elementary school is very worried about Anna,
one of her students who has been out of school,
due to illness, for quite a long time. She has
decided to use the onCourse Home/School
connection to start helping Anna get current with
her schoolwork at home. She sends Anna's
parents information who respond that they think
this is a good idea. Anna's mother calls in on the
school to collect a CD-ROM containing the
onCourse XpressLearning tools. At home the tools
are installed on the family computer, which is
connected to the Internet though a dial up modem.

Johanna has a set of activities she wants Anna to do but decides to augment these with additional material collected from onCourse. Logging on to the Digital Collection she finds a wonderful set short math video clips called 'The Number Crew'. These animated clips contain short vignettes about a group of animals living on a kind of Ark, who are looked after by a dedicated crew. Together the 'Number Crew' and the animals explore a range of numeracy concepts. There is even a special number line calculator for using at home together with dozens of specific activities. Johanna sets up a 'shared workspace' just for Anna, her parents and herself. She includes the calendaring tool so that she can schedule audio meetings with Anna's parents, to keep in contact, give support and discuss any specific issues. Then Johanna organizes all the materials she has collected from onCourse, adds her own assignments that she has given to her students and places the files into Anna's shared workspace.

At Anna's home, her mother has installed the onCourse XpressLearning tools onto their computer. Anna's mother knows to reach the onCourse service by going to Channel Thirteen's web site where she logs onto the Internet. Together, they see Anna's workspace appear and fill up with all the materials Johanna has prepared for her. The only people who can get into Anna's workspace are Anna herself, her parents and Johanna. Nobody else in the school, or anywhere, knows that Anna's workspace exists; it is

She wants to watch them all at once, but her mother takes Johanna's advice on how to use them and begins to guide Anna through the programs and activities in an organised way. Every school day, during the lunch break, Johanna makes sure she is at her own PC for twenty minutes or so. Logging on to XpressLearning, she sees that Anna is working. Clicking on the 'Press to Talk' button Johanna asks Anna how she is doing. While they only have a brief conversation Johanna feels that real-time audio contact on a daily basis is important to keep Anna's morale up. Johanna also uses the audio conference tools to have regular, scheduled conversations with Anna's parents. These happen once or twice a week during which time Anna's parents discuss her progress and any concerns that they may have.	As well as text based communications tools, XpressLEarning offers live audio communication. Selecting the Press to Talk button connect the speaker to all those present in the shared workspace.
Johanna likes the onCourse Home/School connection and is planning to help with an orientation on how to effectively use it for the staff at her own school.	