We are writing to provide an update on the scenario planning to put Sakai CLE (Collaboration and Learning Environment), in support of UM’s General Education (GE) starting from the fall of 2011, counting on its peculiar support for virtual spaces of learning in a blended mode of teaching in higher education, especially for creating collaborative communities of inquiry among students and faculty. In this brief report, we have also gathered some operational details expected of CTLE if the Sakai CLE initiative is to come to fruition.

Here are the scenarios planned for your perusal:

1. **Promoting Sakai for GE Courses**
   Starting from Fall-2011, it is expected that CTLE must get involved in the promoting and training of faculty staff in the best use of Sakai CLE in support of student learning in our GE program. CTLE must get ready some basic training packages in the form of face-to-face workshops (each targeting 50 enrolments) and online digital stories to facilitate faculty members’ learning of Sakai CLE before they could put Sakai to productive use as expected. Workshops could be planned in the context of three 2-hour sequences, say, Sakai Training (I, II, III), with each subsequent session built on the foundation of the previous one. Such workshops could be offered in the fall semester respectively in August, September, and October, as well as in January, February, and March for the spring semester. To get faculty members up to speed with Sakai, continually updated online resources must be available through CTLE, be it from the same Sakai-powered portal system, or from some other sites of convenience.

2. **Experiencing Learning Design through Sakai**
   It is expected that CTLE should organize a retreat (targeting 50 – 100 participants) in learning design, at least once a year, or better, once a semester, in December for fall semester, and in June for spring semester. This learning design retreat is meant to develop in our faculty staff, the vision and mission of learning-centered education, in the context of designing appropriate student learning experiences throughout course enactment, to empower our students to learn, especially through the Sakai CLE, in coordination with other platforms like MOODLE. The motivation is to facilitate the creation of a community of inquiry (physical and virtual) among teaching staff, who are able to gather momentum in their scholarly ways of teaching, in support of a quality undergraduate learning movement at the University.

3. **Organizing Annual AI Summit in Assessment for Student Learning**
It is expected that in anticipation of outcomes-based assessment (OBA) to be effected in our elite undergraduate education, CTLE is to demonstrate how Sakai CLE has been positioned to serve this important mission, especially through its portfolio mechanism. In order to spark the OBA movement at UM, CTLE could organize once a year starting from 2011/2012 (say, before or after Christmas, in December or January), an internal Appreciative Inquiry (AI) summit around the core topics of *Assessment for Student Learning*, elaborating on what it means to assess for student learning, and how best it could be conducted, and why it is so important for the institutional development of UM. Sakai has had its share in such an important mission. Such an AI summit is meant to involve the academic community of UM to learn what we are yet to learn from their perspectives, and gather data for continuous improvement in strategic planning of quality measures in teaching and learning enhancement for the following year of work.

4. **Customizing the Sakai CLE**

Sakai, as an open source, Web-based, collaboration learning environment (CLE) is focused primarily on higher education. It supports the activities of students, teachers, researchers, and Sakai administrators. Sakai is flexible and enables users to configure it for their own specialized audiences. Teachers can create course sites and add chat, forums, blogs, wikis, and many other tools. Students can, among other things, upload assignments, use the tools, and interact with instructors and classmates. Researchers and groups of peers can create project sites for sharing materials and ad hoc interactions. Sakai has a set of frameworks (internal structures) that makes it easier for those who want to build tools. By default, a new user owns a worksite with only a basic set of tools enabled, including a few for self-administration purposes. If the user wants, he or she can request a project, course or portfolio site:

- **Project** – A project site has two main types of users: the site maintainer and those who can use and share the resources and tools. Typical users of a project site include researchers working on the same study, teachers who wish to compare notes, and ad hoc groups of users who wish to interact together online.
- **Course** – A course site is a virtual online expression of a real course. The target audiences are teachers who maintain the site with teaching assistants and students who use the site. Teachers can post exams, send announcements, upload syllabi and grade book results, and choose which tools the students can use to interact. Teaching assistants have less power, but can maintain forums and help maintain processes such as the ebb and flow of marking assignments. Students can chat, take tests, upload files, and send mail to others in the course.
- **Portfolio** – Portfolio sites are places where students store evidence of their work in a structured format. As a student progresses through his or her education or course, that evidence builds up within an online structured set of links and web pages. This can be helpful for finding employment later because potential employers can make judgments based on the evidence presented.
Essentially, with all the data gathered from inside UM through CTLE’s activities in various workshops, retreat, and AI summit, it is believed that the use of Sakai could be further tailored to the authentic needs of our quality movement in undergraduate education, and in the area of institutional research, too.

5. Staging Sakai as Evidence-Based Mechanism to Renew Undergraduate Education

It is expected that CTLE has a mission to develop what evidence-based mechanism to use in support of UM’s movement in elite undergraduate education. Accordingly, one of the most archetypal uses for portfolios suggested in Sakai is the personal representation portfolio, namely, our student portfolio. Another example of Sakai portfolios in use is the teaching and learning portfolios. And the third type of Sakai portfolio most commonly created is the assessment and accreditation portfolio. They are briefly described below for further exploration:

- **Personal representation portfolios** have a long history of use in disciplines such as art, music, writing and photography, where a culture of presenting samples of one’s work has long been the norm. These types of portfolios are generally created to showcase a selection of one’s work in a given area, in order to demonstrate talent, experience, skill or development. Such portfolios may also be created to provide evidence of one’s development over time across different areas. An example of this might be a resume or curriculum vitae, assembled using artifacts from one’s online learning environment and shared with potential employers, educational institutions, mentors, peers or other interested parties. Portfolios created for personal representation tend to have both a developmental and a creative focus. They are most effective when they guide users in collecting information about themselves, assist users in developing their virtual identities and facilitate users’ presentation of themselves to designated audiences. Some common examples of personal representation portfolios include: digital resumes, professional portfolios, and personal narrative portfolios.

- **Teaching and learning portfolios** have an educational focus and are generally used to gain insight into a teaching and learning process. They are multi-faceted, guiding students in collecting learning artifacts, reflecting upon these in relation to a linked set of learning standards, objectives or criteria and presenting their work for feedback and evaluation. Teaching and learning portfolios require advanced planning on the part of educational practitioners in identifying learning outcomes, objectives, or criteria used to represent the goals of the teaching and learning process. Many practitioners find that the process of creating a teaching and learning portfolio is as valuable as the actual product for their students. Asking students to reflect upon their learning and present their work in a way that best speaks to their mastery of a subject, issue or experience is a fundamental experiment in meta-cognition that goes beyond what the average student is traditionally asked to do in a classroom. By giving students the opportunity to reflect upon their learning and share their learning artifacts with external audiences, these portfolios seek to make the processes of teaching and learning more transparent as well as accessible. Some examples of teaching and learning
portfolios include: general education portfolios, disciplinary portfolios, and extra-curricular transcript portfolios.

- **Assessment and accreditation portfolios** are generally derived from teaching and learning portfolios and are used to assess the efficacy of a given instructional program or objective. In an age of accountability measures applied to education, this type of portfolio is steadily growing in use. Assessment and accreditation portfolios tend to include quantitative measures of student performance gauged against a set of learning outcomes that have been identified by an instructor, program, department or institution. By using reports that aggregate and analyze data surrounding student learning in relation to a predefined set of educational outcomes, these types of portfolios provide a rich source of information about the actual results of the teaching and learning process and can therefore help institutions align their institutional practice with their stated institutional mission or goals. Institutions may present this data along with representative artifacts to demonstrate their progress in fostering learning in accordance with their goals. The results of assessment portfolios are thus a valuable resource for the accreditation process. In support of accreditation or program assessment, they are usually combined with portfolios for teaching and learning to aggregate and analyze assessment data and identify representative artifacts of learning. Some examples of assessment and accreditation portfolios include: institutional outcomes assessment portfolios, departmental outcomes assessment portfolios, and institutional accreditation portfolios.

6. **Innovating Teaching and Learning with the International Sakai Community**

With hundreds of institutions, thousands of instructors, and millions of students having now used Sakai around the world, we have an endless number of examples of how this CLE is being deployed in education today. The instructional approach taken vary enormously, from traditional (say, posting lecture slides online) to extremely innovative (say, real-world simulations). Looking across the continuum of instructional applications, it is evident that those on the inventive end exhibit the potential Sakai holds to transform the traditional educational experience into something more engaging, richer, and more meaningful for the learner. How should CTLE be positioned to broaden the horizon of UM’s faculty members in terms of innovative teaching and learning? It was from a desire among Sakai Teaching and Learning interest group to highlight and share these more inventive applications that the *Teaching with Sakai Innovation Award Program*, initially sponsored by IBM and the Sakai Foundation, was born. The program is not aimed at identifying technically complex uses of Sakai, rather to find those uses of the technology, even very simple ones, which are driving true innovation in how instructors are teaching and students are learning. It is expected that CTLE should encourage those teaching staff with Sakai teaching experience to participate in this worldwide award program and present their work in the annual Sakai conference, to get in touch with the international communities of inquiry. Accordingly, it is expected that CTLE should sponsor some teaching grants for interested staff to do innovative research in teaching and learning, as an important contribution in the Scholarship of Teaching and Learning (SoTL) at UM.
7. The CTLE Support Environment for UM GE Program Launch

It is expected that the operation of our Sakai-powered CLE from CTLE in support of UM’s GE program starting from the fall of 2011, should work as something like the following environment:

- from Australia National University’s Alliance system: https://alliance.anu.edu.au/portal/
- from Oxford’s WebLearn system: https://weblearn.ox.ac.uk/portal
- from Indiana University’s OnCourse system: https://oncourse.iu.edu/portal
- from Stanford University’s CourseWork system: https://coursework.stanford.edu/portal
- from University of Michigan’s CTools system: https://ctools.umich.edu/portal
- from University of California at Berkeley’s bSpace system: https://bspace.berkeley.edu/
- from Cambridge University’s Camtools system: https://camtools.cam.ac.uk/
- from Amsterdam University’s UvA Communities: http://www.communities.uva.nl/portal/
- from Marist College’s ilearn system: https://ilearn.marist.edu/xsl-portal

In view of the coordination occurring between CTLE and ICTO in support of the Sakai experiment, this brief report ends with a note of appreciations for Professor Simon Ho, our Vice Rector in Academic Affairs, whose encouragement for us to try in sorting out the kind of support needed to kick off the collaboration, is highly appreciated. We are to meet Jason, the Director of ICTO today at Professor Rik D’Amato’s office at 11:00 am for a detailed discussion of the kind of collaboration expected between CTLE and ICTO, covering not just the exploration of Sakai, but some other further issues related to Notebook computer availability in some GE classroom prototypes in the form of studio-style learning space in our A3-BLDG to be completed by March-2011. More information about Sakai could be obtained from: https://www.indiana.edu/~sakaikb/