Participatory learning with the use of wiki technology enables learners to contribute in varied ways to achieve both individual and shared learning goals. Learners can easily participate as a learning community to share, discuss their ideas/projects and comment on each other's ideas/projects within a wiki platform.

The use of wikis promote peer-to-peer learning and encourage students to look over each other’s shoulders says Eric Thompson, an Associate Professor and chair of Graduate studies in the Department of Sociology at the National University of Singapore. In this session, he provided insights into harnessing the power of Wiki platforms for participatory learning – not only to make students more aware of both the potential and pit-falls of the medium, but also to facilitate and inspire active peer-to-peer learning and teacher-student interactions in a large classroom setting. He shared his experience with using wikis in the classroom and discussed on what worked for him and how it could work for others. He highlighted on how his students moved away from individual competition and transformed into participatory learners aggregating their ideas and experiences in a way that enhanced everyone’s learning.

What is a Wiki?

A/P Thompson started his talk with explaining on what a Wiki is – “A collection of web pages designed to enable anyone who accesses it to contribute or modify content.” It is a particular kind of platform which allows people to create web content rather quickly (i.e. without having to learn HTML). Though this platform was introduced fairly soon after the World Wide Web (www), it became popular only through Wikipedia, the world’s best-known “Wiki”. It was this wide popularity and influence of Wikipedia that prompted A/P Thompson to start using the wiki technology in his classes. (Note: The word “Wiki” comes from Hawaiian “wiki-wiki” meaning “quick”).
Moving from Discussion Forum to Wiki

A/P Thompson explained on how he relied heavily on discussion forum ten years ago, which was primarily of the Q & A type. He highlighted the differences between discussion forums and wikis as tabled below:

<table>
<thead>
<tr>
<th>Discussion Forum</th>
<th>Wiki</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Organized as “Threads”</td>
<td>• Organized as “Pages”</td>
</tr>
<tr>
<td>• Relatively Informal (“Discussion”)</td>
<td>• Relatively Formal (“Pages” of a Book)</td>
</tr>
<tr>
<td>• Students are more familiar with contributing</td>
<td>• Students less familiar (“I didn’t know I could edit it!”)</td>
</tr>
<tr>
<td>• Information is hard to find (tangled threads!)</td>
<td>• Information is relatively easy to find (hyperlinked)</td>
</tr>
<tr>
<td>• Generally limited to text (and short messages)</td>
<td>• Can embed just about anything (digital) – images, videos, etc – any length of text</td>
</tr>
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He also explained that though he could have used blogs, he decided to use wikis. Blogs, he clarified are restrictive in the sense that the author can only edit the articles and only allows other users to add in their views and ideas through comments.

Why Use Wiki?

A/P Thompson started using wiki as an attempt to come to terms with the power and prevalence of Wikipedia and taking inspiration from Mike Wesch’s “A Portal to Media Literacy”. Similar use of wiki platform in classes was relatively rare in those years! Students he said, generally have the tendency to take Wikipedia as an authoritative reference. Hence in 2007/2008 (Semester 2), he set up a group assignment which required the use of Wikis. As part of the assignment, students were required to find a page on Wikipedia relevant to Gender Studies and re-write it for the module, “SC6214: Gender Gender Culture and Society”.

Originally, his intention was to have the students revise Wikipedia Though the assignment proved technically challenging, it proved to be very successful and students clearly learned a lot about Wikipedia! (Student: “I didn’t know that just anyone could write entries.”; “Some of the information is really bad!”). Students also learned to think critically and were able to critically engage with the information that was available to them. This experiment was on a small scale with only 10 graduate students in the class. He pointed out that it might be difficult to scale-up for large undergraduate classes.

A/P Thompson informed participants on how he set up class Wikis for the modules using Wetpaint.com (a free educational wiki, when he started). Over the coming years, he set up three wikis and made a comparison of how he used it across these modules.
## Comparison of Three Wikis

<table>
<thead>
<tr>
<th>Module</th>
<th>SC6214: Gender Culture and Society</th>
<th>SC2218: Anthropology &amp; the Human Condition</th>
<th>SC2220: Gender Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class Size</strong></td>
<td>Small-sized Graduate Class (10 Students)</td>
<td>Medium-sized Undergrad Class (68 Students)</td>
<td>Large-sized Undergrad Class (148 Students)</td>
</tr>
<tr>
<td><strong>Activity Type</strong></td>
<td>Individual Projects on Wiki – modeled on “term paper”</td>
<td>Individual Contributions &amp; Group Project</td>
<td>Individual Contributions &amp; Group Project</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td>Relatively little interaction on the Wiki Students did not have an opportunity to fully use the power of wikis</td>
<td>Good interaction, but somewhat constrained by group structure Students were not “free” to contribute how and where they liked.</td>
<td>More open-ended</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No groups; students told to make “two substantial contributions” (in each half of semester)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Notes on Lectures, Readings, Films</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pages on News items, Popular culture, etc.</td>
</tr>
</tbody>
</table>

A/P Thompson elaborated that the use of wikis in his undergraduate classes proved incredibly useful. He felt the group projects allowed for good interaction compared to assigning individual projects. However, students were somewhat constrained by group structure as they were not “free” to contribute how and where they liked. The students used the wiki platform as “collective class notes” – for lectures, readings and films. He elaborated on how he follows an “open-ended pedagogy”, where lecture notes/slides and webcast of all his lectures were available to students. The students were then required to make a substantial contribution (at least a 500-words article) to the class and were not constrained to any particular format. The students could:

- write notes on the lecture;
- summarise on what happened during the lecture;
- provide commentary on a lecture, going beyond the summary to analyse on the concepts discussed; and
- bring in new related-information and examples that the lecturer might not have thought of.

The open-ended wiki approach allowed for elaborate and more creative contributions, which brought in useful, relevant material far beyond that which the instructor could do alone. One problem that he encountered was that the number of contributions could be massive to read with a class of 150 students. Using the wiki makes it easy for him to review and compare contributions fairly rapidly compared to marking (grading) a stack of written assignments. In the recent years, he has also made it
mandatory for students to make two contributions – one in the first half of the semester and the other in the second half.

As an example, he quoted the World cultures project – to look at one traditional culture and then compare it with 3 or more cultures – that his students were assigned to work on. The wiki platform allowed his students to easily produce these pages, include in images, videos and links to information. Importantly, all the information is available in a more public space and this openness of wikis motivates students to do well and take ownership of their work. A/P Thompson also guides students by posting a set of “exemplary models” from the previous batches to minimize the students’ learning curve. This lets students them know what the instructor expects to see on wikis before students start their assignments/projects.

Lessons Learnt

- **Lesson 1: Architecture (how to set-up the Wiki)**
  It is always important to think about the architecture that would suit your style. But, whatever be the architecture it is important to provide enough guidance and support for students on what they could do. For A/P Thompson, his architecture was based on:
  - How can students best contribute and learn on the Wiki platform? –So his approach was to use the Wiki as a set of “collective class notes” and discussion forum.
  - Assign group and/or individual projects (online term papers)
  - Another approach would be to post sets of problems or questions.

- **Lesson 2: Incentives!**
  It is known that students work for grades (if they just wanted to learn, they could sit in a library or surf the web). A/P Thompson provided students with a guideline on a “minimum” or “general” (average) expectation while he did not specify a “maximum” limit. This allows some students (20-25%) do a lot-more than expected while most (70%) stick to doing the necessary and as expected, there would be the 5% students who do almost nothing. He always made a point to credit students who contributed more in terms of both quantity and quality. He emphasized that in one of his modules when he did not make group interactions (critique and feedback) a very explicit requirement tied to grades, the result was that there was minimal Interaction on the Wiki.

- **Lesson 3: Opening up maximum discursive space**
  It is important to maximize the space allowed for students to contribute. In some modules, he made the Wiki participation more organized (students were assigned to groups; each group was responsible for writing up summary and commentary on particular readings) while in others he allowed for a more open-ended approach. The open-ended approach was more rewarding – both to the students and lecturer. He would also provide suggestions on the numerous ways possible to contribute. Though each student was expected to make at least two “substantial” contributions (e.g. about 500 words of text), the “open-ended” mode inspired much more participation and allowed them to be more creative.
Evaluation (of students)

The structure of the Wetpaint Wiki made evaluation (relatively) easy. Each student (wiki member) had a page on the wiki listing all of their contributions – to pages and discussion threads. Contributions could be easily quantified (number of page and thread contributions; number of words, widgets, etc. contributed on pages). Contributions can also be evaluated qualitatively and was easy to find through hyperlinks.

Recommendations:

- Take time to familiarize yourself with the Wiki platform and how they work (before using; building the basic architecture will take you a long way)
- Take time to familiarize your students with Wiki (but, they can and will figure out a lot of it).
- Be prepared to let go control of content. Always remember that you are not responsible for everything on the Wiki!
- Getting students to learn the culture of Wiki learning is more important than technical details.
- Getting students to be technically competent in communicating (increasingly communicating through blogs, web pages, etc is becoming important)

Pedagogical Advantages that Wiki Offers

In conclusion, A/P Thompson ended by emphasizing that “Wiki is an excellent environment for group collaboration projects encouraging peer-to-peer learning, and it is vital to clearly define what you want your students to do, the purpose of the project, and its expected outcomes”. He highlighted the following features on why he is encouraged to using Wiki in his classes:

1. **Wiki encourages peer-to-peer learning**
   The wiki changes the role of the lecturer and allows the instructor to engage the students much more directly than lecture or tutorial (discussion group) formats. Wikis provide much deeper access into students’ involvement in their own as well as their peers’ learning and understanding of course materials. This allows for greater learning as valuable contributions from students are added which would be unlikely to surface otherwise.

2. **The Wiki encourages students to look over each others’ shoulders**
   In this mode of learning, students can look over each other’s shoulders, exchange ideas, and generally inspire each other. This experience in using Wiki (like life!) is not a closed book exam as this is not (purely) individual competition but is more open-source not proprietary learning. (Kill kiasu culture! Reward those who share, contribute and enhance everyone’s learning.)
Q & A Session

Following the presentation by A/P Thompson, a lively discussion with a Q & A session followed. Listed below are some questions from the session.

Q: **How long did it take for you to get to know and familiarize with using wikis?**
ECT: Using the wetpaint, I did not find it difficult at all. I found setting up and using a wiki quite easy. I might have spent a total of few days in creating a wiki, setting up pages. I have not tried using NUS Wikis but hope to migrate to that in the near future as the NUS wiki format improves.

The wetpaint is quite user-friendly. It took only a few days for me to put up my website and wikis. You will need to create the different pages by adding new pages, and the editing tools are pretty self-explanatory and relatively simple to use like any other word processing program. Wetpaint automatically creates the template so all you need to do is to edit and put in content. So, yes, it requires some effort but it is very worth the effort.

Q: **Is it possible to track students?**
ECT: It was easy to track the students using Wetpaint. Wetpaint gives detailed breakdown information on what each user has contributed. However, this feature is not available within the NUS Wikis and only gives the most recent contributions. However, the history any individual page would then give details of all the contributions/edits made.

Q: **Using Wikis looks great, but looks like an enormous amount of work on the part of the instructor. So how do you evaluate?**
ECT: Most of the work by the students is on their contribution of their own pages and not a whole lot interaction is happening. This involves reasonable amount of assessment work similar to that of evaluating an essay assignment. Usually at mid-term, I quickly read through the assignments to get an understanding of what they are doing and give them an assessment – Excellent, Very good, Good, Adequate, Need Improvement, Inadequate – but will not provide a grade.

I actually set up a template in a word document that has their names, user names for the wikis and has their contribution title. I look at their contribution – read through the page(s), see what they said, whether it makes sense, whether it is interesting, see how much they have done – and then I evaluate it and make the assessment and also write comments on how they could improve on the pages or if they need to include in more pages.

Q: **There is not too much interaction and collaboration but when there is, do you have conflict with one student not happy with the other student editing on their work?**
ECT: I recommend them to try to contribute to pages if they can either improve the page or be able to provide a better format. I inform students that they will get credit for going through other people’s work and for editing to improve on the page. Hence, the guidelines that you provide your students should address this issue. I discuss this with students and advise them to add another page rather than deleting the original page made by their peers when editing. They could add an additional page and provide a secondary summary, an alternative summary or add commentaries to the existing pages. And, I assure my students that I will look at all their submissions and look at all the versions submitted, even if the pages have been deleted or heavily edited by their peers.
Q: Wiki pages are available in the public space. Have you been worried that your students might put incorrect information?
ECT: Usually the problem of incorrect information does not arise, and that could be due to the nature of our project and discipline. Because they are providing with commentaries giving their own opinions or their point of views, there is not really an incorrect factual information.

Q: If Wikis are used in a field like the Sciences, would it not be difficult for students to come up with content?
ECT: Yes, it might be difficult for students to come up with content in technical subjects. There are wikis where they address this problem by putting up questions or problems. The students try to figure out or give answers to these problems.