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IMPACT OF WEB TECHNOLOGIES ON STUDENT-LECTURER CONNECTEDNESS

Abstract
In academic sense connectedness is recognized as students’ active engagement in the academic and social opportunities at their school based on their understanding that teachers at school care for them as individuals, as well as for their learning (British Columbia, 2012). The web as a modern technology for communication is now used universally and this spreading trend might affect student-lecturer connectedness. In this area, many studies have focused on the impact of using the internet and web applications on students and lecturers. These studies have widely investigated this impact on student’s achievements, attitudes and have also shown how the role and performance of the faculty has changed. This paper investigates how students’ uses of web technology to communicate with lecturers have impacted on either negatively or positively on their connectedness with the lecturers. 1661 students from 30 universities and educational institutions in Saudi Arabia participated in this research. Results of this research paper show that students find it easier to communicate with their lecturers by using web technologies such as e-mail social web applications. Additionally, web technologies have many benefits in terms of making students are more engaged in the classroom.

Keywords: Connectedness, PASW, Power, SIRS, web 1.0 and web 2.0
**Brief literature review**

The focus of this research is on the web 1.0 type of online communication such as emails messages. This method of communication has been used between the students and lecturers in educational matters since it appeared in 1991. This research does not consider web 2.0 communications which include social network websites. In Saudi Arabia, where the data collected from, web 2.0 has not yet been used in education. Therefore students’ opinions on this research paper reflect their experiences in using web 1.0 methods of communication with lecturers. Data in this research was collected from an environment where the student-lecturer relationship is very formal and strict to assess whether the communication through the internet is beneficial between the students and their lecturers.

It has been argued whether a good student-lecturer relationship impacts or does not impact positively on student achievements (Richmond et al., 1987). Recent studies have confirmed that student-lecturer relationship plays an important role on improving students’ performance and outcomes (Finn, 2012) (Lessard et al., 2010, Lasky and Estes, 2009, Adeyele and Yusuff, 2012). In most countries the regulations and customs determine the relationship between the student and lecturer (ref). This relationship tends to be formal because of the position of the lecturer as knowledge deliverer/class leader and the student as knowledge recipient (Valiente et al., 2012). However, in general, this formal relationship is fast changing (Symons, 2011). Additionally, the nature of the relationship between the student and lecturer is different from one culture to another. (Fusani, 1994, Alexander et al., 2007, Zhan and Le, 2004, Roach et al., 2005). For example, Australian students believe that they and their lecturers are equal apart from the fact that the lecturer has more knowledge. American students have a very friendly relationship with their lecturers in general (Sin, 2012). In Asian countries such as China and Saudi Arabia, lecturers have the patent-like responsibility to guide student’s lives and they have a formal relationship with their students. Student-lecture connectedness considers the backbone of student-lecturer relationship as an important element of student academic engagement in classroom, (Giles, 2008). Waldeck et al., (2001) classified the reasons why students might contact their lecturers into three, namely reasons; clarification, avoid travel or uncomfortable face-face meeting and for social issues. He found that students who have experiences in communicating with the lecturer by e-mail have a positive feedback about the experience. Having strong connectedness relationship between students and their lecturers is highly important as it impacts positively on students’ grades and self-confidence (Micari and Pazos, 2012). The level of student-lecturer connectedness is very much linked to the lecturer’s personality and the use of his/her legitimate power. The lecturer owns the key control on the connectedness relationship with the students. (Sidelinger et al., 2012).

**Methodology**

A Simi-structured questionnaire was distributed to a wide range of students in higher education to gather data about their experience of using web technology in their education. Student Instructor-Relationship Scale (SIRS) instrument with minor amendments was used to measure how students’ knowledge gained from using websites has impacted on student-lecturer connectedness. The instrument consisted of 12 items of 7 likert-scales. In total, 1361 participations were accepted as valid. 969 were males while 377 were females and 15 did not mention their gender. PASW (Predictive Analytics Software) was used to analyse close ended questions and thematic analysis was used to analyse open-ended questions.
**Results**

Initial results show that the uses of web pages by students for the purpose of communication with the lecturer is very low among students of both gender as shown in figure (1). More than 60% of students use websites only for 1-5 hours and less per month. However, despite this low amount of usage, it has improved student-lecturer connectedness. 71.96% of female students and 69.35 of male students felt that they were more connected to their lecturers when using online line communication such as emails and forums. Majority of students prefer and found it easier using email to contact their lecturers.

As mentioned earlier the questionnaire consisted of 11 items. The result shows that all items were correlated as shown in appendix (I) which means that any item presents the whole items’ results. From table 1 it can be noticed that the impact of internet websites on students-lecturers connectedness is linked with the age of the student. From the following table you can see that increases of the students-lecturer connectedness is linked with the age of students. The relationship increases in the line with the age increase. Students in the age 40-49 years feel more connected to their lectures via internet than the students in the age category 19-39 as shown in table 1. This result can be generalised as it also applies to other factors such as age, gender, subject, level of education and type of institution (public or private).

![Figure 1: Impact of internet websites on student-lecturer connectedness, result from analysing the current data](image)

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 or under</td>
<td>53.60%</td>
<td>56.37%</td>
</tr>
<tr>
<td>20-29</td>
<td>56.37%</td>
<td>58.14%</td>
</tr>
<tr>
<td>30-39</td>
<td>76.47%</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Impact of internet websites on student-lecturer connectedness based on age, result from analysing the current data

**Discussion and recommendations**

As highlighted in the literature section above, student-lecturer connectedness differs from one culture to another. Results from previous studies show that student willingness to use online communication is high in environments where student-lecturer relationship is friendly. As mentioned earlier, the data for this research was collected from an environment where student-lecturer relationship is very formal. The results of this research found that samples of students in this research were willing and preferred to contact their lecturers via online methods. This result is quite similar to the studies that are held in environments where the relationship between student and lecturers is considered friendly. These findings have therefore led to the conclusion that web communications helps students to have better contact with their lecturers regardless of the nature of the relationship between them. Authors of this paper recommend that the lecturers should give more attention to students’ e-mails and messages. Replying on students’ online inquiries has positive feelings on the students and they make them more interactive with the lecturers. However, human sense of face-to-face contact and discussion is needed and should not be neglected.
Appendix (I)

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-1</th>
<th>Item-2</th>
<th>Item-3</th>
<th>Item-4</th>
<th>Item-5</th>
<th>Item-6</th>
<th>Item-7</th>
<th>Item-8</th>
<th>Item-9</th>
<th>Item-10</th>
<th>Item-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item-1</td>
<td>1</td>
<td>0.589</td>
<td>0.45</td>
<td>0.524</td>
<td>0.508</td>
<td>0.388</td>
<td>0.314</td>
<td>0.317</td>
<td>0.338</td>
<td>0.438</td>
<td>0.404</td>
</tr>
<tr>
<td>Item-2</td>
<td>0.589**</td>
<td>1</td>
<td>0.515</td>
<td>0.612</td>
<td>0.684</td>
<td>0.436</td>
<td>0.304</td>
<td>0.28</td>
<td>0.332</td>
<td>0.41</td>
<td>0.408</td>
</tr>
<tr>
<td>Item-3</td>
<td>0.45**</td>
<td>0.515</td>
<td>1</td>
<td>0.567</td>
<td>0.534</td>
<td>0.663</td>
<td>0.256</td>
<td>0.203</td>
<td>0.349</td>
<td>0.392</td>
<td>0.428</td>
</tr>
<tr>
<td>Item-4</td>
<td>0.524</td>
<td>0.612</td>
<td>0.567</td>
<td>1</td>
<td>0.73</td>
<td>0.527</td>
<td>0.383</td>
<td>0.357</td>
<td>0.402</td>
<td>0.51</td>
<td>0.459</td>
</tr>
<tr>
<td>Item-5</td>
<td>0.508</td>
<td>0.684</td>
<td>0.534</td>
<td>0.73</td>
<td>1</td>
<td>0.541</td>
<td>0.378</td>
<td>0.311</td>
<td>0.364</td>
<td>0.47</td>
<td>0.454</td>
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<tr>
<td>Item-6</td>
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<td>0.663</td>
<td>0.527</td>
<td>0.541</td>
<td>1</td>
<td>0.259</td>
<td>0.208</td>
<td>0.361</td>
<td>0.347</td>
<td>0.418</td>
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<td>0.259</td>
<td>1</td>
<td>0.734</td>
<td>0.444</td>
<td>0.494</td>
<td>0.463</td>
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<td>0.203</td>
<td>0.357</td>
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<td>0.208</td>
<td>0.734</td>
<td>1</td>
<td>0.527</td>
<td>0.528</td>
<td>0.451</td>
</tr>
<tr>
<td>Item-9</td>
<td>0.338</td>
<td>0.332</td>
<td>0.349</td>
<td>0.402</td>
<td>0.364</td>
<td>0.361</td>
<td>0.444</td>
<td>0.527</td>
<td>1</td>
<td>0.546</td>
<td>0.538</td>
</tr>
<tr>
<td>Item-10</td>
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<td>0.41</td>
<td>0.392</td>
<td>0.51</td>
<td>0.47</td>
<td>0.347</td>
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<td>0.528</td>
<td>0.546</td>
<td>1</td>
<td>0.647</td>
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<td>0.408</td>
<td>0.428</td>
<td>0.459</td>
<td>0.454</td>
<td>0.418</td>
<td>0.463</td>
<td>0.451</td>
<td>0.538</td>
<td>0.647</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

**Based on my use of the internet as a communication method with my lecturer, it’s easy for me to connect with my lecturer.

**Reference**


