

USING GOOGLE SITES TECHNOLOGY TO TEACH UNDERGRADUATE COURSES

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Abstract

The purpose of the paper is to report the outcomes of the use of Google Sites in teaching undergraduate courses in Economic Terminology at Volgograd State University. The report is based on a students' survey that allowed the project team to collect relevant data grouped according to the four criteria: accessibility, interactive capacity, problem solving facilities and feasibility of online tasks, and a teachers' questionnaire where page creation potential, interactive capacity, problem solving facilities, and task formulation options were assessed. The findings demonstrated that Google sites may considerably support instructors of undergraduate courses in their efforts to motivate students' learning and empower them with interactive course materials.

Introduction

There is a three-year history of using Google Sites in different educational settings (Google for Educators, 2011). Educators agree (Cisler, 2011; Google Sites, 2010; McDonough, 2011) that these tools can spark teachers' and learners' imagination with examples of innovative ways of teaching and learning as well as of sharing ideas more quickly and getting things done more effectively. Having access to the sites produced for educators and by educators does not require hardware or software to install or maintain, since everything is delivered through a standard Google Chrome Web browser anytime and from anywhere.

However when applied to a Russian academic setting with its underpaid faculty and therefore traditional resistance from instructors to extra efforts that may not pay off in the near future¹ the following questions need to be answered: How is

¹ In international comparisons Russia's higher education ranks 2.99 while G7 countries average 7.5 in Economic Incentive and Institutional Regime index and 6.19 against the average for G7 countries of 8.5 in ICT index (Kastueva-Jean, 11). Currently in most Russian state-owned universities the workload of instructors is 24 hours per week and there is no system of financial incentives for the utilization

the Google Sites tool different from the use of the university e-learning platform? In which kind of courses may we use this technology? How will the site technology change our working practice? What benefits will it bring for students and professors?

Background

Volgograd State University is a medium-sized higher education institution in the South of Russia. It has 14,000 students in the traditional Russian “specialist” or diploma programs along with the Bachelor’s and Master’s degrees.

The idea of integrating Google Sites into a university teaching and learning environment came as the result of several factors that are changing the structure and content of the Russian university education. These factors include the rigid framework of the University e-learning platform and the budget cuts due to the shift to the Bologna three-cycle degree structure (Bachelor–Master–PhD). Russia joined the Bologna process in 2003 (Zgaga, 2006, pp. 36, 39, 143) and is in the process of actually transforming its higher education system to make it compatible with Bologna principles. By now Russian universities have essentially moved to the two-cycle or four-plus-two year system. The actual transformation is yet to happen, but all the structural foundations are in place (*Towards the European Higher Education Area*).

The expectations of the initiators of the project conducted at Volgograd State University were based on the assumption that Google Sites may bring a number of advantages into the teaching and learning practices. Firstly, it was viewed as an accessible tool with diverse interactive features to transfer from traditional teacher-centered classes to student-centered learning activities. Secondly, it was supposed to mitigate the bad effects of student group enlargement particularly for courses taught in foreign languages. Thirdly, the Google product was chosen to increase the faculty’s awareness of the students’ critical assessment of their performance thus enhancing the faculty’s potential to meet students’ demands.

Undergraduate Courses and Google Sites

Google Sites allows instructors to display a variety of information in one place — including videos, slideshows, calendars, presentations, attachments, and texts. With Google Sites instructors can:

of ICT in educational programs though instructors have to meet the requirement of integrating technology into the teaching process.

- customize sites for teaching purposes,
- share the site content for viewing or editing with a student, team, class, entire university, or the world,
- create sub-pages to keep content organized,
- control access to sites,
- search across Google Sites content with Google search technology,
- set up project management tracking, based on multi-user collaboration, and
- upload any file formats.

The Google Sites project enthusiasts at Volgograd State University were instructors who volunteered to test the effectiveness of the use of Google Sites in their classes. They hoped that the integration of the site technology into the regular curriculum activities will enable instructors working with large student groups to guide the students' learning practice more efficiently by providing interactive learning opportunities and eliciting adequate preparation for classes (Ozkan, 2010). The learning activities were based on weekly portfolio assignments, tutorials through Google Talk and Google Chat, sharing and editing documents via Google Reader and through Google Docs. These activities were expected to result in a personalized response and make the educational environment more student-oriented.

Problems

The study focused on two large undergraduate Economic Terminology (ET) second-year classes in the Economics and Finance Schools of Volgograd State University. The ET course consists of the two parts: Introduction to Economics and International Economics and is offered in three foreign languages. Before the experiment started weekly preparation for a 130-minute Economic Terminology class had traditionally included memorizing up to 20 definitions and explanations of basic notions within one selected topic. Students had been also asked to make mini-presentations on the syllabus topics of their choice. The three main problems that instructors teaching the course had traditionally experienced were the inconsistency of the course content, length and prerequisites (34 academic hours, 2 hours per week irrespective of students' foreign language proficiency); lack of students' enthusiasm in learning and interpreting definitions in a foreign language; and poor engagement in class discussions.

Proceedings

The project stipulated 120 students' access to the Google Sites created by the course instructors especially for them to receive portfolio assignments and send their products and comments to the instructor on a weekly basis. The students were also using pod casts with instructor's explanations of the topic problems as well as materials stored in Google Reader. Besides, especially for the Economic Terminology course the course instructors taught students to participate in multi-

person real-time editing of documents, mainly translations of topical economic texts in Google Docs.

Students who chose to prepare mini-PPT presentations as their class contributions were encouraged to discuss ideas and share information in Google Chat and Google Talk. Group work on such presentations included sharing slides via the Google Sites before deciding on the final option of their PPT.

At the end of the fall 2010 semester the students involved in the project were asked to participate in a survey to assess the pros and cons of Google Sites usage particularly for the study of Economic Terminology. The survey focused on the four criteria of the sites' use: accessibility, interactive capacity, problem solving facilities and feasibility of online tasks delivered via Google Sites.

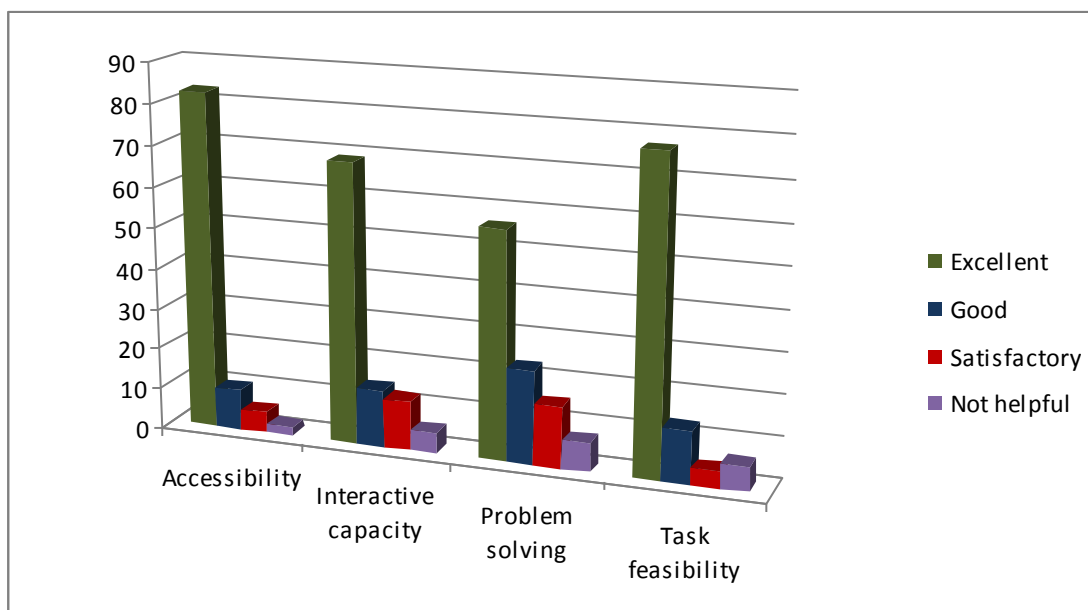
The instructors who taught the course with the help of Google Sites or observed the process evaluated the use of the technology by completing a questionnaire. Its questions were grouped in four categories: page creation potential, interactive capacity, problem solving facilities, and task formulation options.

Findings: Pros and Cons

Students

The interaction via the Google Sites technology stimulated better engagement even of those very reluctant to learn and had been demonstrating opportunistic behavior by not doing their homework ever since they entered the classroom. As shown in Figure 1, 83% of students evaluated accessibility of Google sites as "excellent," 69% thought that the sites provided excellent interactive capacity, 56% were strongly in favor of the site's problem solving facilities and 77% fully approved the excellent feasibility of online tasks.

Figure 1: Students' assessment of the accessibility, interactive capacity, problem solving facilitation and feasibility of online tasks via Google Sites



The students were also asked to provide feedback on how the use of Google Sites contributed to their personal and professional development. In their comments approximately 75% of students gave highly positive feedback and acknowledged that the Google Site technology reduced power distance² in classes, removed uncertainty from the instructors' requirements and helped them to communicate with each other more effectively. They also agreed that the portfolio assignments from the Google Sites they used tested their knowledge appropriately and trained their time management skills.

About 11% of students remained indifferent to the use of the Google Sites, because, as they wrote in their comments, they learn better by reading a course book and not by communicating with other students.

Almost 15% of the group considered electronic portfolio assignments to be inefficient because, as they confessed, they copied answers from their group mates.

² Power distance is one of the five intercultural dimensions developed by G. Hofstede (1984). This cultural dimension looks at how much a culture does or does not value hierarchical relationships and respect for authority.

The findings demonstrated that on the one hand, Google Sites' interactive tools may considerably support teachers of undergraduate courses in their efforts to make course materials more attractive for students. On the other hand, the survey results showed that 25% of students tend to be either free-riders who prefer to copy from others or those who resist collective action because they learn better by themselves.

Instructors

The evaluation proceedings included a questionnaire for 40 instructors who enjoyed the Google Sites' advantages as the project participants:

- 10 GB of storage
- sharing settings across classes
- easy use within the selected student group
- variety of tools that may be used with Google Sites

and were asked to assess their page creation potential, interactive capacity, problem solving facilities and task formulation options. Table 1 shows the results for the instructors' questionnaire on the utilization of Google Sites.

Table 1: Results of the instructors' questionnaire, 40 instructors participated

	Excellent	Good	Satisfactory	Not helpful
Page creation potential	53%	19%	22%	14%
Interactive capacity	65%	20%	15%	—
Problem solving facilities	29%	33%	19%	9%
Task formulation framework	62%	17%	14%	7%

All the instructors agreed that they liked the integration between Sites, Docs, and Calendar, as well as the sharing access. However, they indicated that Google Sites are definitely designed for everything to be done at the Google Applications level, and not pulled back and forth between the offline and online settings. Hence, since the problem solving curriculum activities in the second year required constant guidance on the part of the instructors, they were not very enthusiastic about using Google sites for this purpose. Therefore the technology was not approved as a fully suitable problem solving aid option for undergraduates unless their offline communication with the instructor was organized on a regular basis (McKinney, Dyck, & Luber, 2009).

Besides, since the launch of Google Sites requires what 30% of instructors called “extra unpaid work” they were reluctant to enhance the interactivity of their Economic Terminology course in addition to their regular workload.

Some of the instructors attempted to define the integration of Google Sites as of any ICT's — a use that permits either enhanced teaching or enhanced learning (Lareki, Marinez de Morentin, & Armenabar, 2010). In general instructors look on the integration of Google sites into the teaching practice as a source of interactive approach that may improve students' learning potential. However there are concerns that given the situation with lack of extra work financing it will be hard to provide a university setting where the technology will be used appropriately, consistently and regularly.

Filters

All the instructors pointed out that we need to remember about Google filters that position some things at the expense of others. The very existence of the filters, in their opinion, provides rejection of Google's search priorities. So every time our students use Google, the filters perform the so-called Google selected search which may be treated as prioritization, but given the flow of information the term can easily become an exercise in semantics.

Conclusions

The Google Sites project participants concluded that the integrative use of Google Sites implies their routine use in the teaching and learning processes particularly in the enlarged groups of learners. They pointed out that the technology may be time saving on condition that instructors regularly work on updating the site content and organizing student interaction as well as monitoring and controlling the feasibility of students' assignments.

The integration of this technology into the teaching process must therefore be understood as a way to combine students' learning and socializing through a range of interactive and communication channels with face-to-face learning and socializing.

However, 7–14% of instructors who were involved in the Google Sites project at Volgograd State consider the technology's potential to be “not helpful in the present-day situation” because the use of the Sites requires extra work for which they are not paid and thus do not agree to fulfill.

The reality is that technology itself is not defined as either good or bad. To me personally the question remains how universities are going to develop, manage, regulate, and control technological change because the decision about what to develop and how to encourage and regulate the use of Google products institutionally will greatly impact individual use (Tinio, 2003). However, I hope

that decisions about how to use such products will still be made by each individual engaged in their use.

The integration of Google Sites in the undergraduate level educational context is recommended for transmission and processing of information for purposes of interactive teaching, learning and educational development specifically in large student groups with limited number of class hours.

The technology is excellent while organizing guided learning via electronic portfolio assignments for a large number of students because it reaches each of them and makes learning personalized.

The use of Google Sites may be recommended as an important interactive working practice for teachers because it makes us all collectively responsible for our guiding actions rather than pretending that all our actions are controlled institutionally.

We still have to examine the human, institutional and economic use of the technology to evaluate its full impact on teaching undergraduate courses. This assessment may provide further discussion about the effect of technology on human and professional development of learners and teachers and not just about the technology itself.

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