

Wikis to Support Collaborative Web Spaces to Promote Youth Well-being

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Youth is a period of rapid emotional, physical and intellectual change, where young people progress from being dependent children to independent adults. Young people who are unable to make this transition smoothly can face significant difficulties in both the short and long term. Although the vast majority of young people are able to find all the resources they need for their health, well-being and development within their families and living environments, some young people have difficulty in locating resources that can help them and, moreover, difficulty in integrating into society. One way to support this transition is to create an environment that enables youth to be well supported through the provision of information and the creation of a community where youth feel empowered to collaborate with their peers as well as decision makers and legislators.

The popularity of the Internet as an information source has grown extensively. Its sheer expanse and convenience is ideal to disperse information. This makes the Internet a potentially powerful tool to enable youth to gain access to resources and information they need. Our interest lies with web spaces for youth that enhance their well-being and empowerment. Web spaces open up a whole range of possibilities for using web technology (for example Web 2.0) to interact with youth and provide them with knowledge in an interactive manner.

We focus our research on two aspects of youth well-being and web spaces: (1) Youth are more than just consumers of digital content; they are also active participants and creators of this new media culture, developing content themselves, designing personal websites, and launching their own online enterprises [5]. (2) Web spaces are said to either undermine or foster well-being [3]. Governance and control issues surrounding web spaces are therefore of particular importance [3].

Among popular applications of Web 2.0 (blogs, microblogs, social networking sites etc.), the wiki technology stands out as a popular group collaborative tool. Wikis are a collection of pages that can be linked with each other using simple keywords. These pages can be edited collaboratively using web browsers. Wikis are interactive Web sites that can offer numerous benefits to users. Anyone can create a new wiki page, add or edit content in an existing wiki page, and delete content within a page, without any prior knowledge or skills in editing and publishing on the Web.

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Wikis are therefore able to provide a community environment, which allows the youth of today to voice their opinions on issues that matter most to them and thus foster a collaborative space. These ingredients enable youth to be empowered and in turn enable their well-being in some regard.

However, the question of governance of web spaces in general or wikis in particular with regards to youth well-being has not been in the focus of research. We therefore want to explore in the following how youth collaborate in web spaces and what consequences these collaboration has for the governance of wikis.

We propose two dimensions for wikis to support Youth-Well-being. The *social collaboration* dimension aims at enabling social collaboration of youth using distributed virtual identities. The *governance* dimension accommodates for the requirement that the web spaces must assure not to provide harmful content for youth. In the following, we will first explore the social collaboration dimension in more detail and then the governance dimension.

Social Collaboration Dimension: Youth is seeking for pillars for navigation in a complex and confusing world and tend to understand knowledge in a social context [4]. Consequently, youth seek to modify the web spaces so as to 'leave their mark' and receive acknowledgement and other positive feedback for their contributions. For Wikis, this has two implications: Youth should directly see who has contributed which content and they should be able to create their own identity in the Wiki. Most wikis allow traceability of which user has contributed which content; it is, though, mostly hidden in special 'version' pages that are often not easy to understand. Some wikis allow direct contributions to pages by leaving comments rather than editing the page directly and the comments are directly attributed with the user who made that comment. Most wikis allow users to create their own pages.

In addition the creation of a coherent identity is an important part of adolescence. Online role play games are a good illustration of this concept where users are able to create virtual identities and are encouraged by the social dynamics of the virtual world to make their virtual identity stronger and more appreciated. By allowing the content to be enriched with the meta-data of the author of the content adds a social dimension to collaboration with Wikis. As a result rather than collaborating on topics and content with anonymous users, it becomes more a communication process between virtual identities that present themselves through their contributions and personally designed pages.

Youth regularly make use of many different communication channels: such as chat clients, email, discussion forums, shout

boxes, Youtube and VoIP. A Wiki for youth can strengthen the youth user community by offering as many communication channels as possible.

Governance Dimension: A requirement that has come up with the growing, not only of Wikipedia, but also other wikis is the governance of the user contributions [1]. This is of special importance in the context of youth web spaces as their well-being depends on how well they are protected. The governance should lie on two pillars: The peer control of the youth and control from adults. This requires at least two different processes and roles for government. Most wikis differentiate between system administrator users (e.g. Sysops in MediaWiki) and normal users. A wiki specifically designed for youth would require a finer differentiation of user rights and roles: For instance, youth supervisors, youth users and adult supervisors.

Based on the two dimension discussed before, we propose two central requirements for wikis to support well-being: they should *support social integration* as well as *enable governance*.

Support Social Integration: Youth Wikis are supported by a number of integration layers. We follow the ideas of the proposed architecture of Emig et al. [2] in the context of SOA that differentiates between choreography, orchestration and composition of services. We adapt this differentiation for designing of services for different ways to create or contribute content (Figure 1).

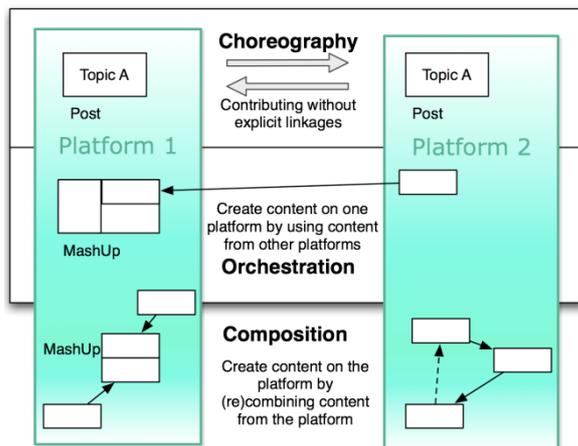


Figure 1: Choreography, Orchestration, Composition

Following the requirements from the Social Collaboration Dimension, users create content by recombining content from other sources or from within the platform. If users create new content by exclusively recombining content that is hosted at the current Wiki or platform, we speak of composition of content. If the users creates content as recombination of content from the Wiki platform and/or content from other web sources (such as social networking sites), we speak of orchestration of content. As a more general concept, we see content orchestration as expression for the fact that the meaning of content that is provided on one platform depends on content that is contributed to other platforms. If a user wants to express his/her ideas, he/she can do so by “posting” content to different platforms with or without explicitly linking the individual contributions.

Wikis support these layers by allowing easy linkages between pages and linkage of pages with external contents as a central functionality. By altering or deleting these links, the structure of the Wiki can be reorganised. These links are, however, most of the time, simple hyperlinks. Some Wiki extensions go

in the direction of creating more sophisticated linkages by including the content from another web page in the Wiki page as kind of mashups. One example for this is the Google Maps extension for MediaWiki. As youth users contribute a great share of content on social networking sites, these sites shall be integrated in the Wiki environment as well. Allowing easy integration of the Wiki with the various social networking sites or other web resources allows users to link their online identity with the Wiki. Examples for possible implementations are MediaWiki Extensions (eg. Facebook, Wordpress) or the MindTouch Deki Express Extensions (eg. Digg).

Enable Governance: A Wiki to support youth well-being should provide governance mechanisms that guide the technology as well as the content. According to social integration layer, youth users contribute content by composition, orchestration, and choreography. Governance must address all of these to create a youth space that can enhance well-being. Whereas composition is relatively easy to govern as all of the content resides in the Wiki. Orchestration is more problematic as the content created by the users is dynamically generated from content that is stored somewhere else and therefore can change dynamically. Even greater challenges come with the choreography of content where the meaning of content on the Wiki may depend on what youth users have contributed to other platforms. We see that, whereas the other components of our architecture can be well-supported by current or emerging technologies surrounding Wikis, the special governance issues that we have raised in the framework section are difficult to support with current Wiki technology.

This paper has provided two dimensions that affect youth well-being in web spaces in general and particularly in the context of wikis. We have further specific these dimensions to central requirements that can guide a technical implementation of wikis. Our dimensions raise interesting questions regarding the governance of wikis in the context of youth well-being. This will be explored further in future research. In addition, future research will also consider the implementation of a youth web space based on the dimensions purposed in this paper using Wiki technologies.

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