

Online Community - Computational Thinking

Assessment #3--Design of an Online Community

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Background

Website: Computational Thinking-What's It All About?

<https://flickofthewristgra.wixsite.com/computationalthinkin>

We live in a world fashioned around and influenced by technology. As technological tools emerge and change the landscape of the global world, including the education system, in such a way that contributes to shaping a new generation of learners. With this new generation of learners permeating into the classroom, it is essential that teachers keep up-to-date with the changing applications and theoretical methods of curriculum standards (ISTE, 2017). One such competency, Computational Thinking (CT) is a crucial ingredient in the framework for the global learner. After searching various online resources for a reliable and complete definition of Computational Thinking (CT), I have come up short. There is a changeable and continuously evolving terminology which hinders the complexity and meaning of CT including ongoing debates between experts in the field on the specific terminology. The experts are leaning towards an abstract and non-concrete definition. Wing (2010) indicates that CT terminology is fluid because of the constant state of emerging and changing technologies which use the various key components within the logical thinking and systems thinking regime. CT is currently an essential element contributing to and molding the future of the education system. CT is viewed as an incredibly important subject matter to be teaching the students' in today's cross-curricular classroom (Wing 2010).

Since there are many opinions, definitions, inconsistencies, and philosophies that are consistently evolving and changing the meaning and understanding of CT, this scenario sets up a perfect storm for a website specifically designed for the interest, passion and voice(s) aimed at CT and the networking of educational professionals in the field of computer science (Wing, 2010). The generalization of CT embodies logical and sequential thinking along with problem-

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solving skills, lacking is the in-depth focus on the understanding, applications, and probing of the functions within the CT computer science field and educational community (Hutchison, Nadolny, & Estapa, 2015). Districts are playing catchup as the technology standards have been redesigned to include computer literacy, computational thinking, problem-solving, and the empowered learner utilizing the diversified and emerging technological advancements in coding, programming, and engineering (ISTE Standards for Students, 2018).

The creation of this online website community establishes a virtual environment which allows for the members' voices to be heard in a safe environment (Paloff & Pratt, 2007). The mission of this online community website entitled *Computational Thinking-What's It All About?* is to share ideas, ask questions, and provide feedback by generating and creating innovative thoughts and conversations on what CT is and how to further the process into the classroom (education system). This online community website intends to provide educational professionals in the field of computer science with the platform for a rich and engaging exchange of thoughts, ideas, classroom lessons, and resources.

Design and Methodology

In today's global society, data and information are of easy access with just fingertips touches on a keyboard. The changing and updating of the technological tools, the online formula for conversations within all fields of society allows for accessibility all the time. With the multitude of differentiated access, the online community, online learning community, and community of practice values entities which should not be overlooked nor neglected as part of the "information highway" which reinforced by the free access of the internet. With the building of an online community, various portals open up and provide a platform for individuals who have specific interest to link and join with others with the same intentions. Within these portals

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of the online community lies the common interest which links the members, along with the opportunity to collaborate and connect with others who share the common interest (Kraut & Resnick, 2011). This common interest is the backbone of the online community. According to Wenger, White, & Smith (2012) this online presence “creates moments of togetherness and ways to ‘hang out’” (p. 43).

The website platform for this online community creates and services the fluidity of CT in the world of education. Since CT is in a consistent mold of redefining itself, Wenger, White, & Smith, (2012) communication and connections are very important regarding the special opportunities for members interact with each other in an online community. This website allows for this interaction by access to the forum, blog, latest news, field experts, and scheduled online meetings. The WIX cloud-based web development platform met the needs of this specific interactive online community with a “member’s area features of email lists, agreement policy, forum, blog, subscription form, and create member roles (Post | Wix Blog | Web Design & Small Business Tips to Promote Your Site., n.d.). Also, WIX provides tracking and analytics tools for understanding “allow you to get insights into your customers’ online behavior” (Post | Wix Blog | Web Design & Small Business Tips to Promote Your Site., n.d., para. 07). Besides, the simple design, this site is easy for the members to navigate with tabs located at the top such as home page, about page with a special section for the membership bylaws, professional corner, resources, get involved, frequently asked questions and a contact section. The WIX platform simulates a less frustrating online community and designed for connectivity and exchange of interesting topic of CT. The safety and security were a concern and other platforms hosting a website did not protect identity and privacy as did WIX.

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According to Palloff & Pratt (2007), the building of an online involves creating a “presence...through a threaded discussion” establishes and exhibits an active forum for relevant discussion on the topic of interest for the members. The back and forth conversations allow for diversity and continuing growth of knowledge and eventually leads to a very active online community (p. 11). As noted by Wenger (1998) that a shared practice, continues the bond and connection between members with a common interest to replicate the diverse and complex force which designates a community of practice.

Comparative Website Analysis

The *Computational Thinking, What's It All About* online community website shows many connections and similarities to the communities researched for the first assignment in this course. The edWeb.net online community combines Computer Science and STEM Learning as a free professional site for K-12 educators (edWeb: A professional online community for educators. n.d.). Within this site, CT is part of the overall resource including connecting, collaborating, and sharing of lessons. Another online community researched was LINC, that is divided into eleven groups with a significant constituent of members (Welcome to the LINCS Community!, n.d.). This community, the members have the opportunity to be a moderator. Similarly, the LINC site utilizes a variety of online tools to promote online collaboration between its members, such as discussion forum, bulletins, polls, member directory, calendar, and documents section (Welcome to the LINCS Community!, n.d.). Another online community, the ISTE Computer Science online community encompasses CT along with a range of other fields involving technology (ISTE Connect, n.d.).

There are quite a few similarities with all four of these online communities such as clean design, easy navigation, discussions, blog, forum, and resources. The two differences are the

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number of community members and the broad range of topics covered within the community.

The *Computational Thinking, What's It All About* community niche is narrower than LINC, ISTE, and edWeb. Accordingly, Kraut & Resnick (2011) reinforced that a community should have a specific niche as a unique selling point to attract new members. In the process, the new members come in with new ideas, resources, and opinion that increase the importance of collaboration and connectivity within the specific interest of the members. The major functions and features are found in all four of the communities to provide the best online community experience for all members.

Conclusion

Computational Thinking-What's It All About online community website interweaves and crisscrosses the thirteen objectives of this online community course, *Advanced Building Online Communities* (Zieger, 2019). The groundwork for this website has been described, designed and structured from the course resources such as researching, exploring, connecting, reviewing, communicating, evaluating, and critiquing of different online communities, not only in the CT field but also in other technology fields (Zieger, 2019). The platform is simple which utilizes a mixture of tools that make navigating through the website simple, easy, and direct. The members are required to agree with the etiquette and bylaws when subscribing to the site. This maintains the norms in a safe and informative environment for all members. The exploration, analysis of theories, interviews, and critiquing of different platforms were valuable background knowledge and techniques which helped create and build a unique and diversified online community in a field which needs specific direction and resources on helping education professionals with the understanding and application of CT in the classroom. As Kraut & Resnick (2011) indicated that the purpose of an online community is to allow the ideas and voices expressed in a platform

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which people come together and have civil discussions and exchange of information in which each can learn from another in a virtual environment.

Besides, Kraut & Resnick (2011) believes that “the niche, defending of the niche, and critical mass” are the challenges which face online communities (p. 231). This CT website meets two out of three challenges and with the announcement of this website in the ISTE Computer Science online community, the third challenge will hopefully be met. In addition, *The Truly Monumental Guide to Building Online Communities* (n.d.) reiterates the importance of the three challenges and references goal and mission as a part of a successfully functioning online community. The goal for this community specifically involves the furthering of CT educated teachers and turnkey into the classroom. This virtual online community provides an outlet for connections, sense of belonging, support network, mutual exploration of ideas, supportive roles of members, and the pursuit of developing ideas within the CT framework (Palloff, & Pratt, 2007). Lastly, a shared practice, CT, continues the critical bond and connection between members with a common interest to reflect the diverse and complex driving engine which describes a community of practice (Wenger, 1998).

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