Part 1

Literacy refers to the ability to read, write, and comprehend information. It is a fundamental skill that enables individuals to participate in society, communicate effectively, and make informed decisions. Historically, literacy has been associated with the written word, but the concept has evolved to include various forms of media, such as visual, digital, and computational.

In recent years, computer programming has been described as a form of literacy. Programming involves the use of a programming language to create computer software, applications, and systems. It is a skill that is becoming increasingly important in our technology-driven world, as it allows individuals to understand and interact with technology in a more meaningful way.

By calling computer programming a literacy, we are acknowledging its importance as a tool for communication and expression. Like traditional literacy, programming allows individuals to create and share ideas and concepts in a way that can be understood by others. Additionally, programming can be used to solve problems, automate tasks, and create new opportunities in various fields, such as science, engineering, art, and education.

However, it is important to note that programming is not a replacement for traditional literacy skills. Rather, it is an additional skill that complements and enhances our ability to communicate and interact with the world around us. As such, efforts to promote computer programming as a literacy should be seen as a way to broaden and diversify our educational goals and opportunities, rather than as a substitute for other important skills and knowledge.

Part 2

The notion of coding literacy has been increasingly discussed in recent years, with some arguing that it is a necessary skill for the 21st century, while others have raised concerns about the potential exclusionary effects of promoting coding as a literacy.

The idea of viewing programming from the perspective of literacy and literacy from the perspective of programming, as proposed by Vee in Coding Literacy, is a thought-provoking concept that challenges our traditional understanding of both. This shift in perspective allows us to see programming as a form of communication, and not just a technical skill, which is crucial in today's society where technology has become an integral part of our daily lives.

where she argues that "programming can be viewed as a rhetorical activity that produces meaning and shapes experience." This notion of programming as a form of rhetoric challenges the traditional understanding of programming as a purely technical skill, and emphasizes the importance of understanding the social and cultural contexts in which programming takes place.

These concerns highlight the need for a more nuanced understanding of coding literacy, one that takes into account the broader social and cultural contexts in which it is promoted and practiced.

As stated by Paulo Blikstein, a professor of education technology, "The question is not whether coding should be taught, but rather how we teach it, why we teach it, and for whom we teach it."

One quote that particularly stood out to me from Sam Aaron's talk on "Programming as Performance" is "we should be designing systems that enable people to express themselves and create, rather than just perform prescribed tasks." This statement highlights the importance of creativity in programming, and the need to shift our focus from just teaching technical skills to also nurturing and celebrating creativity.

In conclusion, while coding literacy can be a valuable skill in the 21st century, it is important to critically examine the potential effects of promoting it as a universal literacy. We must consider questions of access, equity, and cultural context in order to ensure that our educational goals are inclusive and diverse, and that we are preparing individuals for success in a complex and rapidly changing world.

Reference list:

Vee, Annette. Coding Literacy. MIT Press, 2017. (Introduction chapter pp. 1-38)

Paulo Blikstein, quoted in "The Potential and Challenges of a Coding Literacy," EdTech Magazine, 22 March 2017,

https://www.edtechmagazine.com/k12/article/2017/03/potential-and-challenges-coding-literacy

Sam Aaron, "Programming as Performance," TEDxBristol, 15 November 2016, https://www.youtube.com/watch?v=0ITZ8Tuyu5I