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Course: SSW – 555 Agile Methods of Software Development

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Q1. Search for evidence that pair programming is better or worse for software development than traditional individual programming.

Answer:

- 1.) Strengthening the case for Pair Programming  
Authors: Laurie Williams, Robert R. Kessler, Ward Cunningham, Ron Jeffries  
Place of Publication: IEEE Software  
Volume and Number: Volume: 17, Issue: 4  
Page Numbers: 19-25  
Date of Publication: August 06, 2002
- 2.) The Impact of pair programming on student performance, perception, and persistence.  
Authors: Charlie McDowell, Linda Werner, Heather E. Bullock, Julian Fernald  
Place of Publication: Proceedings of the 25<sup>th</sup> International Conference on Software Engineering  
Volume and Number: N/A  
Page Numbers: 602 - 607  
Date of Publication: May 03, 2003
- 3.) A comparison of pair versus solo programming under different objectives: An analytical approach.  
Authors: Monica Johar, Vijay S. Mookerjee, Milind Dawande, Subodha Kumar  
Place of Publication: Institute for Operations Research and the Management Sciences  
Volume and Number: Volume: 19, No.: 1  
Page Numbers: 71-92  
Date of Publication: March 2008
- 4.) Improving the CS1 experience with pair programming  
Authors: Laurie Williams, Nachiappan Nagappan, Miriam Ferzil, Eric Wiebe, Kai yang, Carol Miller, Suzanne Balik  
Place of Publication: Proceedings of the 34<sup>th</sup> SIGCSE technical Symposium on Computer Science education, Reno, Nevada, USA.  
Volume and Number: Volume: 35, Issue: 1  
Page Numbers: 359-362  
Date of Publication: February 23, 2003
- 5.) The Effects of Pair Programming on performance in an introductory programming course  
Authors: Charlie McDowell, Linda Werner, Heather Bullock, Julian Fernald.

Place of Publication: Proceedings of 33<sup>rd</sup> SIGCSE technical symposium on Computer Science education

Volume and Number: Volume: 34, Issue: 1

Page Numbers: 38-42

Date of Publication: March 03, 2002

Based on the above articles and research paper, In my opinion pair programming is certainly better than solo programming. As it is mentioned in the above articles and research paper that pair programming can certainly increase the quality of the code and can also increase the productivity of the programmers. Pair programming allows programmers to easily debug their code and come up with a better solution to encounter a problem. It increases the efficiency of the entire code by as it allows programmers to discuss about the most suitable and most efficient data structure for a problem. Pair programming has been proved most beneficial for novice programmers. But it can be useful for even professional programmers. It allows programmers to admit that they do not know something and also encourages them to learn new things. Pair programming is beneficial for programmers as it allows them to easily debug their code and it decreases the level of stress among the programmers. Pair programming can help programmers to understand complex problems and encourages them to find an innovative approach to solve those problems.