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EDG 500 Educational Research and Statistic

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Lab 6

Analysis of Data

Segments – List below, the number by the teacher who is the source of the data. Extend the data table as needed.

Teacher Number	Segment	Topic
2	Complete understanding of mathematics content	content
2	Multi-tasking capabilities	Teaching function
2	Individualization of the program for each student	Teacher quality
2	capabilities of ...disciplining students	Teacher skills
2	capabilities of being flexible	Teacher attitude
4	have a firm grasp of content	Content

4	Able to switch from topic to topic	Teaching function
4	Spot and correct errors	Teacher skills
4	explain concepts in a variety of ways	Teaching function
4	be aware of what is going on	Teaching quality
4	Can keep students on task	Teacher quality
4	Monitor the class	Teacher skills
4	Make sure equipment is cared for	Equipment
6	organization skills	Teacher skill
6	track each student	Teacher quality
6	Keep up with students	Teaching function
6	know when they are spending too much time on a lesson	Teacher quality
6	know when to step in	Teacher attitude
7	able to rapidly switch gears	Teaching function
7	to aim instruction at the individual students	Teacher attitude
7	tailor your vocabulary to a single student	Teacher quality
7	Tailor your presentation to a single student	Teacher quality
8	must have a really good knowledge of math	Teacher skill
8	able to manage everything going on	Teaching function
11	Nerves of steel	Teacher wellbeing
16	able to run a structured classroom	Teacher skill
16	plan thoroughly to coordinate the computer lesson	content
16	able to manage student behavior	Teacher quality
16	able to help the students pull together what they are	Teacher quality

	learning	
16	Able to transfer that knowledge to traditional lessons and test	Teacher skill
17	have a good knowledge of algebra and algebraic methods	content
23	simplify instructions from the program	Teaching function
23	need basic computer skills	Teacher skills
24	adjust the order of lessons	Teaching function
24	Excitement is key to effectively using the program	Teacher attitude
24	able to solve complex math problems	Teacher skill
24	maintain order in the classroom	Teacher quality
25	Need more planning time	Teacher quality
26	Need organization	Teacher skill
26	Need planning	Teacher skill
26	Need flexibility	Teacher attitude

Categories

Paste the completed chart below this heading.

Teacher Number	Segment	Topic
	Math Content	
2	Complete understanding of mathematics content	content
4	have a firm grasp of content	content
8	must have a really good knowledge of math	Teacher skill
17	have a good knowledge of algebra and algebraic methods	teacher skill
24	able to solve complex math problems	Teacher skill
	Equipment Maintenance	
4	Make sure equipment is cared for	Equipment
23	Need basic computer skills	Teacher skills
	Student-Centered Teaching Approach	
2	capabilities of being flexible	Teacher attitude
6	know when to step in	Teacher attitude
7	to aim instruction at the individual students	Teacher attitude
24	Excitement is key to effectively using the program	Teacher attitude
26	Need flexibility	Teacher attitude
2	Individualization of the program for each student	Teacher quality
4	Can keep students on task	Teacher quality
6	track each student	Teacher quality

6	know when they are spending too much time on a lesson	Teacher quality
7	tailor your vocabulary to a single student	Teacher quality
7	Tailor your presentation to a single student	Teacher quality
16	able to manage student behavior	Teacher quality
16	able to help the students pull together what they are learning	Teacher quality
6	Keep up with students	Teaching function
	Classroom Management	
4	be aware of what is going on	Teacher quality
24	maintain order in the classroom	Teacher quality
25	Need more planning time	Teacher quality
6	organization skills	Teacher skill
16	able to run a structured classroom	Teacher skill
16	Able to transfer that knowledge to traditional lessons and test	Teacher skill
2	capabilities of ...disciplining students	Teacher skills
4	Spot and correct errors	Teacher skills
4	Monitor the class	Teacher skills
11	Nerves of steel	Teacher wellbeing

	Effective Teaching Strategies	
2	Multi-tasking capabilities	Teaching function
4	Able to switch from topic to topic	Teaching function
4	explain concepts a variety of ways	Teaching function
7	able to rapidly switch gears	Teaching function
8	able to manage everything going on	Teaching function
16	plan thoroughly to coordinate the computer lesson	teaching function
23	simplify instructions from the program	Teaching function
24	adjust the order of lessons	Teaching function
26	Need organization	Teacher skill
26	Need planning	Teacher skill

Analysis, Findings, and Conclusions

The results of the focus group revealed the skills and qualities needed for a teacher to successfully instruct mathematics using a computer-based application. The instructors highlighted the value of having a solid understanding of mathematical material, strong organizational abilities, adaptability, and the capacity to manage and uphold order in the classroom. In order to accommodate students with various learning styles, they also stressed the necessity of having a working knowledge of computers and the capacity to communicate ideas in various ways.

I divided my financing into seven categories, the first two categories are the Math content and maintenance of the equipment. It is important that each teacher is knowledgeable in math

and that the teacher ensures that the computers and equipment used are in good working order. The next category is the teacher's attitude if the teacher has a pleasant attitude and is able to keep the class engaged that will impact the way students are learning math using the computer. The teachers should have student-centered qualities so that they can individualize the program and meet each student where they need help in understanding the content. The next categories focus on the teacher, they are teacher skills where the skills acquired in the classroom are put to use. Well-being as mentioned in the data teachers “must have nerves of steel”, it is important to be comfortable and focus on the good to be able to provide the best experience. Last is teaching functions, I believe these are the functions that help structure the classroom.

It is evident from the results that teaching mathematics using computer-based software demands a certain set of abilities and traits that are different from those required for typical classroom instruction. Math material competence, the ability to multitask and individualized education for each student, organization, and flexibility, and basic computer skills.

The results demonstrate that teachers who are well-organized, adaptable, and have a solid grasp of mathematics material are likely to succeed in teaching mathematics using computer-based software. Along with being able to adapt to various student learning styles, these teachers must also be able to manage and keep order in the classroom. In order to properly teach mathematics using a computer-based application, it is crucial for schools to give instructors the assistance and training they need.