

Computerized Application for Analysing the Time and Instructional Parameters in Sport Coaching and Physical Education Teaching

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Introduction

A software made in Visual Basic® is presented here, attending two important competencies in the first formation of any preservice Physical Education (PE) teacher or any sport coach: 1) *time management* available to develop the contents in a school or in the training sessions, and 2) *feedback administration* for both students and athletes.

Time management and feedback administration have been shown as two important parameters when evaluating the teaching quality. Because of the utilization of these two parameters, motor learning in schools, skill automation in sport and, at the end, the effectiveness in PE classes and sport training, can be better reached with the enhanced use of time and the correct orientation of the instructions given by teachers and coaches. There are several studies that conclude the importance of both indexes: Barret (2000) and Momodu (2000), for time management or ALT-PE -Academic Learning Time in Physical Education-, Johnson and Ward (2001), for *feedback administration* in PE, or Hastie (1994), for comparing the influence between the two parameters.

Method

This software begins with a starting screen with two buttons (Figure 1) which allow the two possibilities: Time management sheet (student's attention time, time on task, motor engagement time, organization time and improvisation time) and the feedback sheet (frequency: individual or collective, used channel and type being used: specific for the task or affective). For greater detail, see Lozano and Viciano (2003).

The first possibility is a systematic observation sheet of the continuous time or timing with a display for each category to register time, so that, by just clicking once in the appropriate button, the time counter changes and accumulates the seconds in this category. The second is a systematic observation sheet to obtain frequencies distinguishing the kind of each feedback that is clicked and is accumulated for the later analysis. Once the recording is finished (finish button), an option to save the data in Excel software to get the analysis automatically is automatically opened, presenting the information of the registered parameters (in graphics) to the teacher, coach or observer.

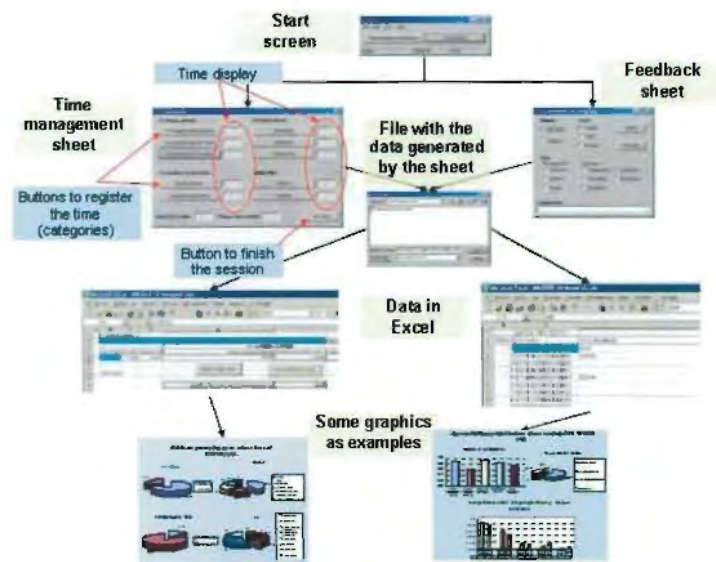


Figure 1. Screens appearing in the software for time management and feedback analyses.

Results

This computerized tool has already been applied showing its efficacy in the formation of PE teachers (Viciana et al. 2003; Lozano and Viciana, 2003). Lozano and Viciana studied, in an intrasubject repeated measure design, the influence of the feedback administered by this computerized tool when registering time management in the time adjustments from the planning to the real practice (with preservice PE teachers). Time management information given to the preservice PE teacher by this tool at the same time a supervising meeting takes place, improves the adaptation of the planning to reality giving graphic information that accelerates the adjustment of time management. Results showed a great and positive influence of Independent Variables (information about time management and supervising meeting) on the base line previously established, confirming our hypothesis.

Conclusion

It is concluded that this software is a very easy and useful tool for preservice PE teachers and sport coaches. PE teachers appreciated this experience and remarked the support given by this tool as they acknowledged their mistakes and key points to be improved. Also in the practicum module at university, it is a good tool to supervise in an objective way, rather than in the traditional way.

References

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