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Development of the Physical Education Teacher Efficacy Scale: Evaluation of Reliability, Concurrent and Construct Validity

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ABSTRACT

The purpose of this study was to develop and examine a valid and reliable instrument to measure teacher efficacy in a physical education setting. Teaching efficacy is defined as how confident a teacher feels that he or she can positively affect the learning of their students. The result of the project is the production of the Teacher Efficacy Scale in Physical Education (TESPE) (see attached scale). Our research found that there are four dimensions of teacher efficacy:

- *Motivation* - reflected a teacher's confidence in his/her ability to motivate students.
- *Analysis of Skills* - revolved around the teacher's ability to analyze student performance of skills.
- *Preparation* - represented the teacher's ability to prepare and plan for instruction.
- *Communication* - revolved around the teacher's ability to communicate information to his/her students.

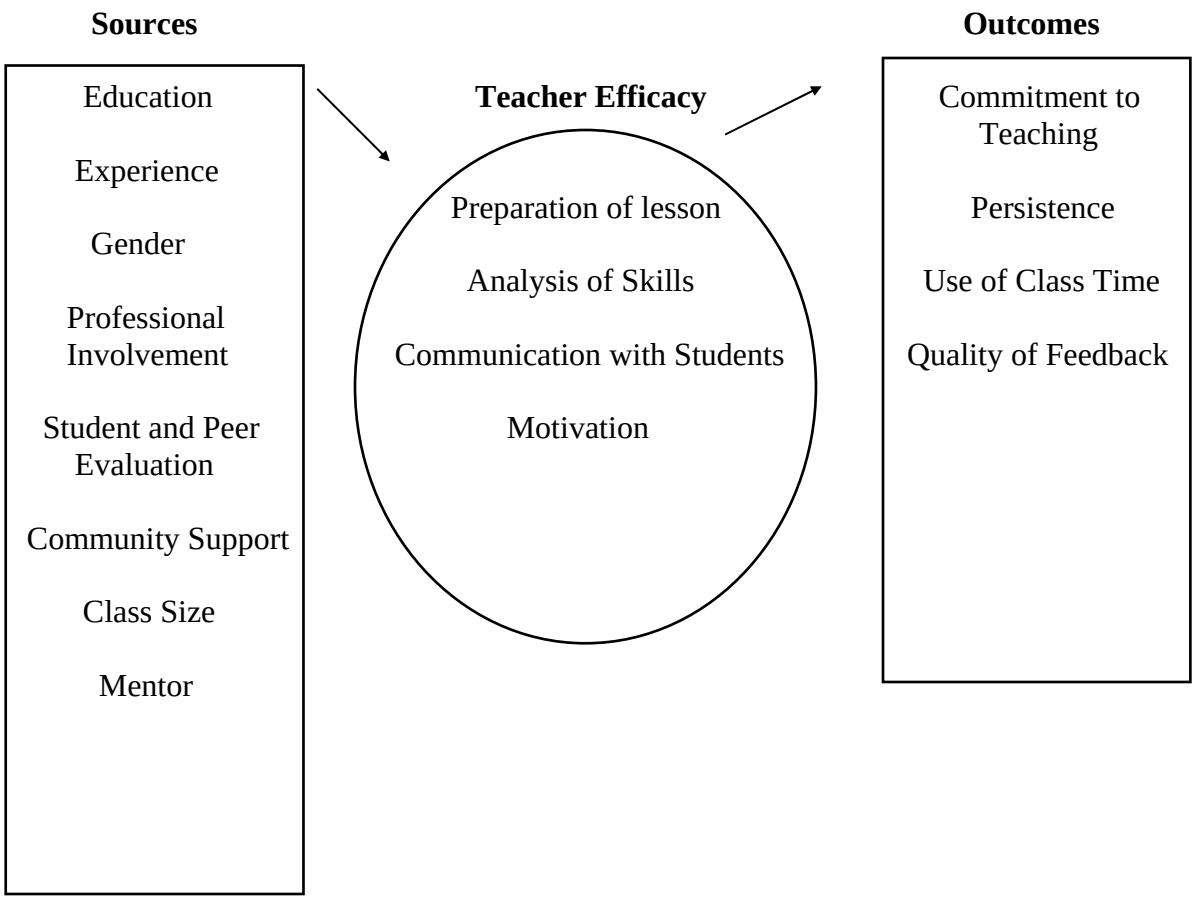
The TESPE consists of 16 items. Each item is rated on a 7-point Likert scale from 1 (no confidence) to 7 (extremely confident) and follows the stem *"How sure are you in your ability to…"*. Sample items were: "…motivate students to attempt all skills and activities in class," "…prepare lessons that match the ability levels of my students," and "…reinforce correct student behavior." The term confidence was used on the questionnaire instead of efficacy because teachers are in general more familiar with the definition of confidence than efficacy. The TESPE is scored by calculating an average score for all 16 items.

The investigators believe that the final version of the TESPE displays good psychometric characteristics. However, more studies are needed to establish concurrent and construct validity and to continue to test the quality of the measure. The TESPE can be used to test our proposed model of teacher efficacy in physical education (see Figure 1). It is hypothesized that teacher efficacy will affect a teacher's commitment to teach, persistence in teaching, use of time in providing instruction, and the quality and type of feedback provided to students. These outcomes are important variables in preparing physically educated students. Future research might examine which source or combination of sources would be most beneficial to pre-service teachers.

Overall, teacher efficacy in physical education is an essential and promising area of study. The TESPE will enable researchers to examine relationships between teacher efficacy and outcomes for teachers and students, allowing the establishment of strategies and interventions for enhancing teaching efficacy in all physical educators.

FURTHER INFORMATION
See diagram and scale below.

Figure 1. Model of Teacher Efficacy in Physical Education.



Teacher Efficacy Scale for Physical Education

Teaching efficacy is defined as how confident you are that you can positively affect the learning of your students. Reflect upon a typical teaching situation and then rate how sure you are about your teaching ability for each of the items below. Please be honest in your evaluation. **Please note that a low number does not mean you are a below average teacher, just less confident in that area of teaching.** Your answers will be kept completely confidential.

1 = no confidence at all 4 = moderately confident 7 = extremely confident

1. adjust your teaching style, when necessary, to motivate your students……..	1	2	3	4	5	6	7
2. analyze what is wrong with a movement…….	1	2	3	4	5	6	7
3. prepare lesson plans using behavioral objectives that promote learning…….	1	2	3	4	5	6	7
4. provide students information feedback about their performance in a positive manner…….	1	2	3	4	5	6	7
5. motivate your students to persist after failing in skill attempts……...	1	2	3	4	5	6	7
6. watch students perform skills and analyze what improvements they should make……..	1	2	3	4	5	6	7
7. plan a developmentally appropriate curriculum for all grades that you teach…..	1	2	3	4	5	6	7
8. explain instructional cues and strategies to your students in ways that they will understand…….	1	2	3	4	5	6	7
9. break down or extend certain skills to match the ability level of your students……...	1	2	3	4	5	6	7
10. prepare lessons that match the ability levels of your students…….	1	2	3	4	5	6	7
11. correctly explain technique cues for skills to your students…….	1	2	3	4	5	6	7
12. talk with students in ways that allows them to feel that you care about them as a student…….	1	2	3	4	5	6	7
13. appropriately describe ways in which your students can improve their performance……..	1	2	3	4	5	6	7
14. organize quick transitions from one activity to another……...	1	2	3	4	5	6	7
15. organize activities in class so that your students frequently feel successful……	1	2	3	4	5	6	7
16. motivate your students to attempt new skills……...	1	2	3	4	5	6	7