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PASS Passes the Learner-Centered Test

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A research collaboration between the Mid-continent Regional Educational Laboratory (McREL) and the American Sports Institute (ASI) concerning their program on *Promoting Achievement in School through Sport* (PASS) began in early 1997. A colleague in Illinois who had seen the program in action, contacted us with the news that this was "a true model of learner-centered principles in practice."

That was exciting to us as we are continually looking for examples of programs and practices that truly enhance motivation and achievement for all students because they are based on sound, research-based principles of learning and individual differences in learners.

Thus, it wasn't long before we were in touch with Susan Kirsch, Executive Director of the American Sports Institute. Our excitement about PASS built over phone conversations and the opportunity to meet in May of 1997 and to talk about how we could connect our work. This article is the story of this connection, the results of our research collaboration, and what the results might mean for students and school reform.

Connecting PASS and McREL's Learner-Centered Model

The basis for connecting PASS's instructional model with our work on learner-centered practices at McREL is a project begun in 1990 with the American Psychological Association's (APA) Task Force on Psychology in Education that defined the research base on learning and learners. The tools for this connection were teacher and student surveys from McREL's Learner-Centered Battery (LCB). Both are briefly described.

The Learner-Centered Psychological Principles

One project of this Task Force, directed at McREL by the first author, was to integrate

research and theory from psychology and education—to surface general principles that provide a framework for school redesign and reform. The resulting document specifies twelve research-based principles (cf. McCombs, 1994, and McCombs and Lambert, 1997).

The principles are an organized knowledge base that supports a learner-centered model and provides the foundation for sound teaching practices. No one principle can be treated in isolation if maximum learning is to occur for each student.

The principles are categorized into domains that describe those areas that have been identified in the research as impacting different aspects of learning. The domains cover (1) intellectual aspects of learning (cognitive/metacognitive factors); (2) motivational influences on learning (affective factors); (3) individual differences in intellectual, social, emotional, and physical development areas (developmental factors); (4) influences of the individual's own self-assessments as well as the assessments of others on learning (personal/social factors); and (5) differences in family background, culture, and other contexts that influence learning (individual difference factors).

The twelve principles apply to all learners—young and old, since as complex human beings, all learners approach learning situations with fundamental qualities in common.

At the same time, however, learners have unique ways of learning that are based on heredity and prior experiences, as well as special characteristics such as interests, talents, and intellectual or physical skills. The common characteristics in the Principles define a general schooling model; the unique characteristics determine the adaptations that K-16 schools must make to meet the learning and motivational needs of all learners.

Defining Learner-Centered from an Empirical Perspective

A central understanding that emerges from an integrated look at the Principles is that for educational systems to serve the needs of all learners, it is essential to have a focus on the individual learner as well as an understanding of the learning process.

Thus, we have evolved the following definition of learner-centered (McCombs & Whisler, 1997): Learner centered is the perspective that couples a focus on individual learners—their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs—with a focus on leaning—the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners (p. 9).

The Learner-Centered Self-Assessment Tools for Teachers and Students

The LCB is a set of teacher and student self-assessment surveys for grades K-16. The Teacher Survey measures two primary variables: Teacher Beliefs and Assumptions and Teacher Perceptions of Classroom Practices. Three factors related to learner-centered versus nonlearner-centered beliefs about learners, learning, and teaching are measured in the Teacher Beliefs section of the survey.

For teachers in grades 6-12, four domains of learner-centered practice are measured in the Teacher Practices section of the survey. These domains cover practices associated with metacognitive and cognitive, affective and motivational, developmental, personal and social, and other individual needs of learners (McCombs, 1994).

The Student Survey measures students' perceptions of their teachers' practices in the same domains of practice as in the Teacher Survey (McCombs, 1994; McCombs & Lauer, 1997). Items are parallel to those in the Teacher Survey, but from the student's perspective. This survey provides teachers with feedback about how each of their students is experiencing their classroom practices relative to their own perspectives. (Note: There are other measures in the LCB for administrators, mentor teachers, and parents, cf. McCombs & Whisler, 1997).

Our Collaborative Research Project: The Research Question

The research question of interest to both ASI and McREL was: *How learner-centered are PASS teachers, as measured by the LCB?* From the perspective of ASI, this question's answer could validate the premise that the eight *Fundamentals of Athletic Mastery*, on which PASS students receive intense education, are also fundamentals of academic mastery (Griffin, 1997).

From McREL's viewpoint, if a program such as PASS, which purports to incorporate learner-centered classroom practices, is demonstrated to be learner-centered by our LCB surveys, there would be additional support for the validity of those surveys.

The Research Study

Two male and two female high school teachers from the Chicago area volunteered to participate. There was a balance between suburban and urban, and all four teachers were veterans of teaching PASS.

In May, 1997, each completed a Teacher Survey and one class of their PASS students

completed the Student Survey. To provide additional reliability for the study, the four teachers each resurveyed themselves and a different class of PASS students in November, 1997. The teachers were not given feedback on the results of their learner-centered assessment between the two survey administrations.

What We Found

Teacher Results

Table 1 indicates teacher and student survey results for the PASS participants. For comparison purposes, there are two additional sources of data reported. One source is from an alternative high school in Colorado which, in our research to date, has demonstrated the most learner-centered scores on the LCB, and which we currently are investigating as a model of learner-centered practices.

The other source of data is a *preferred score* which is the mean score of the 25 teachers in our large validation sample who had the highest proportion of students who were high in both motivation and achievement.

On almost all measures, PASS teachers met or exceeded the learner-centered guideline indicated by the preferred score. PASS teachers were high in their learner-centered beliefs about learners, learning, and teaching, and low in their nonlearner-centered beliefs. They were high in their perceptions of their learner-centered classroom practices, high in their beliefs about being able to influence the learning of adolescents, low in their beliefs about adolescence being a difficult stage, low in student control, and high in autonomy support for students.

Interestingly, PASS teachers were relatively low in their teacher efficacy and reflective self-awareness in May, but much higher on both measures in November, possibly from the positive effect of their spring PASS experience, as well as from the impact of the survey process. The PASS teachers were also similar to the scores of teachers for the learner-centered alternative high school, except for their learner-centered beliefs, which were higher for the latter.

Student Results

The PASS teachers assessed themselves as being very learner-centered, but the real measure of learner-centered comes from the perceptions of the students. On student measures, the PASS teachers were particularly impressive, surpassing both the preferred scores and the perceptions of students from the learner-centered Alternative High School.

Students of the PASS teachers perceived their teachers' classroom practices as highly learner-centered, but even more impressive are the high levels of motivation

expressed by the PASS students. Their scores indicated high self-efficacy (the variable most strongly correlated with achievement) and high task engagement with low work and effort avoidance.

What It Means for Students and School Reform

Keys to Student Motivation and Achievement

We learned from our research collaboration that PASS meets the criteria for a learner-centered program. It supports an instructional process that PASS teachers view as meeting student needs. More importantly, however, the students in the PASS program report high levels of motivation and their achievement is at high levels.

What that says to us is that PASS addresses the needs of the whole learner—intellectual needs, motivational needs, and other needs such as students' physical and social needs. It engages students by its holistic approach and, in turn, their achievement is enhanced.

PASS as a Model for Total School Reform

The features of the PASS program are those that can serve as a model for other school programs and practices. More than that, PASS can become a model for defining those qualities of total school reform that are needed to both engage students and help them achieve high academic standards.

We are delighted that PASS *passed* the learner-centered test! The sound, research-based practices that are incorporated in the PASS program were demonstrated to pay off for students and teachers alike, thus making it a model for total school reform.

<u>References</u>

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Table 1
Comparisons of PASS with Most Learner-Centered Programs/Practices

	PA	PASS	Learner-Centered	Preferred Score
			Model	
Teacher Measures	5-97	11-97	Alternative H.S.	
	(n=4)	(n=4)	(n=19)	(n=25)
Teacher Beliefs and Assumptions:				
Learner-centered beliefs about learners, learning, & teaching	3.3	3.5	3.6	≥3.2
Nonlearner centered beliefs about learners	2.4	2.3	1.8	<2.4
Nonlearner centered beliefs about learning & teaching	2.3	2.4	1.9	<2.4
Teacher Perceptions of Classroom Practices:				
Creates positive interpersonal relationships/climate	3.9	3.8	3.5	≥3.6
Honors student voice, provides challenge, and encourages perspective taking	3.7	3.8	3.3	≥3.4
Encourages higher order thinking and self-regulation	3.5	3.3	2.9	≥3.2
Adapts to individual developmental differences	3.3	3.2	2.9	≥2.7
Teacher Efficacy	2.9	3.4	3.2	≥3.2
Teacher Beliefs About Adolescence:				
Teachers Can Influence	3.3	3.3	3.6	≥3.5
Difficult Stage	2.8	2.7	2.8	<3.0
Teacher Reflective Self-Awareness	2.6	3.1	3.1	≥3.0
Teacher Support for Student Autonomy:				
Highly Controlling	2.5	2.5	2.1	<2.5
Highly Autonomy Supportive	3.4	3.1	3.6	≥3.3
Student Measures	(n=95)	(n=83)	(n=227)	(n=483)
Student Perceptions of Classroom Practices:				
Creates positive interpersonal relationships/climate	3.6	3.5	3.4	≥3.3
Honors student voice, provides challenge, and encourages perspective taking	3.5	3.4	3.3	≥3.2
Encourages higher order thinking and self-regulation	3.3	3.2	3.2	≥3.1
Adapts to individual developmental differences	2.9	2.9	2.7	≥2.6
Student Motivation and Learning Variables:				
Self-Efficacy	3.6	3.6	3.3	≥3.4
Effort-Avoidance Strategies	2.0	1.7	2.0	<2.0
Performance-Oriented Goals	2.5	2.2	2.2	<2.6
State Epistemic Curiosity	3.1	3.3	3.1	≥2.9
Active Learning Strategies	3.2	3.1	3.1	≥3.0
Task Mastery Goals	3.2	3.4	3.3	≥3.1
Work-Avoidant Goals	2.1	1.8	2.1	<2.3
Classroom Achievement Score	88.4	9.68	84.8	90.7

Most preferred score patterns are based on the scores of the 25 validation sample teachers with the highest proportion of students high in both achievement and motivation. For the validation sample, data were collected from 113 middle school teachers and 2476 middle school students, 155 high school teachers and 3136 high school students from six states: AK, CO, IL, KY, MI, NC.