Chapter 5.6
Fostering Successful Learning Communities to Meet the Diverse Needs of University Students by Creating Brain Based Online Learning Environments

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ABSTRACT

This paper introduces the reader on how to foster successful learning communities to meet the diverse needs of university students by creating a brain based online learning environment. Students come in all shapes and sizes. At the university level, students enrolled in online programs, have made a choice to do so. Today, online education is a unique and important venue for many students wishing to continue (or start) their education. It is part of a new culture with many distinct characteristics (Farrell, 2001). For instructors, online instruction creates its own set of challenges in terms of the course design and implementation. The author hopes that developing an understanding of how to create a brain based online learning environment will inform the reader of ways to foster successful learning communities to most effectively meet the diverse needs of the students it serves.

INTRODUCTION

Students come in all shapes and sizes. At the university level, students enrolled in online programs, have made a choice to do so. Individuals of various ages enter our programs. These individuals learn
differently, and because this is true, we must keep
this in mind in creating a learning community at
the university level that will meet the diverse needs
of the online learner. Today, online education is
a unique and important venue for many students
wishing to continue (or start) their education. It
is part of a new culture with many distinct char-
acteristics (Farrell, 2001). For instructors, online
instruction creates its own set of challenges in
terms of the course design and implementation in
order to most effectively meet the diverse needs of
the students it serves. In order to most effectively
foster a successful online learning community,
it is important to consider what it means to meet
the diverse needs of students.

BACKGROUND

Differentiation has come to mean “consistently us-
ing a variety of instructional approaches to modify
content, process, and/or products in response to
learning readiness, interest, and learning profile
of academically diverse students” (Tomlinson,
1999). The standards tell us what our students
need to know and be able to do in the K-12 set-
ing. The same is true at the university level when
preparing school principals. State and national
standards guide our programs so that they ad-
dress what future school leaders must know and
be able to do. Although the goal is the same – to
become school leaders – these students are still
diverse in terms of readiness, interest and learn-
ing profile. Differentiated instruction helps to
get students in achieving the end result, while at
the same time teaching them how to learn in a
meaningful way.

The pedagogical theory that guides differen-
tiation is constructivism; the belief that learning
happens when the learner makes meaning out of
information (Benjamin, 2005). Just as we have
a variety of learners in the face-to-face setting,
the same is true in an online environment. Online
education must capitalize on student’s unique ap-
proaches to learning, says Nishikant Sonwalkar
(2003). In order to do so, we must design and
implement programs of study and courses that
differentiate to meet the needs of the students
we serve. Tomlinson’s (1999) framework on
differentiation of instruction indicates that it is
“a teacher’s response to learner’s needs guided
by general principles of differentiation, such as
respectful tasks, flexible grouping, and ongoing
assessment and adjustment.”

At the university level, students enroll in
programs because of their need or their desire to
study in a particular field. With this in mind, we
as instructors need to create the conditions for
someone to become interested in learning. The
research (Tomlinson, 1999) indicates that indi-
viduals learn in accordance with their readiness
to do so. Jensen (2000) indicates that moderate
challenge is critical. When a task is not challenging
enough, students become bored. Yet, if a task is
too challenging, students become anxious. Also
when interest is tapped, learning is more likely
to be rewarding, and students becomes more
autonomous learners. When designing a learn-
ing environment, helping students to discover
and pursue their passions can maximize their
engagement with learning, their productivity,
and their individual talents. Finally, individuals
vary in preference for conditions of learning and
that consideration of the multiple intelligences
(Gardner, 1991) is also important.

BRAIN BASED LEARNING
ENVIRONMENTS

Clearly the most important role of the online
instructor is to model effective teaching and ac-
cept “the responsibility of keeping discussions
tracked, contributing special knowledge and
insights, weaving together various discussion
threads and course components, and maintaining
group harmony” (Rohfeld & Hiemstra, 1995, p.
91). Differentiating instruction is good teaching