



Multiple Methods to maximize Student Engagement in Fully Web-Based Math Courses

Paper Presented At

TCC Worldwide Online Conference

Hawaii, USA

April 22 to 24, 2014

**Dr. Om Ahuja
Professor, Mathematics
Kent State University
Ohio, USA**

Agenda





Definition of Engagement

Engagement is defined as the degree of student's interest, efforts, time-on-task, motivation in learning course contents, and achieving desired outcomes including high grades



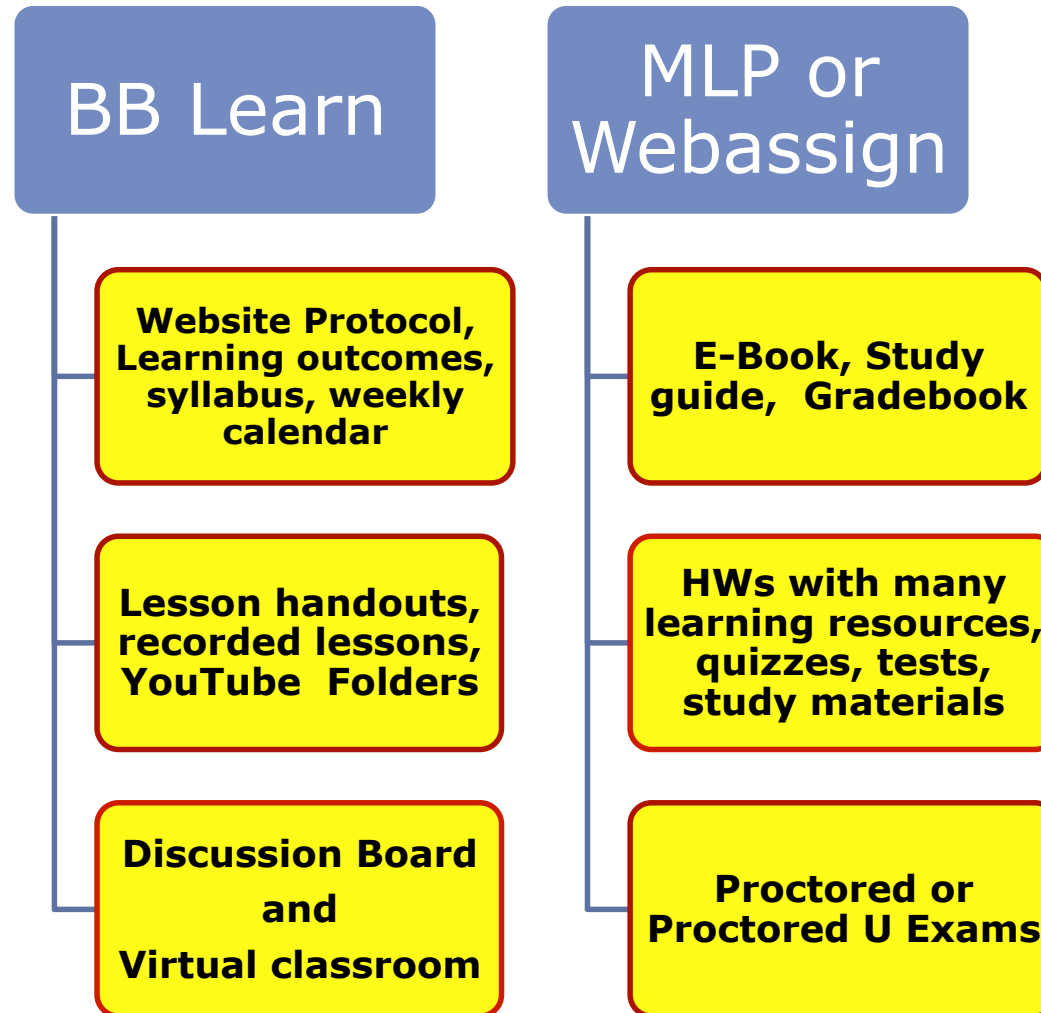
Main Problem

How does a faculty help students in a fully website course to encourage student–student interactions, remain involved, get connected, get motivated, learn and earn high grades in the course?



Websites Used

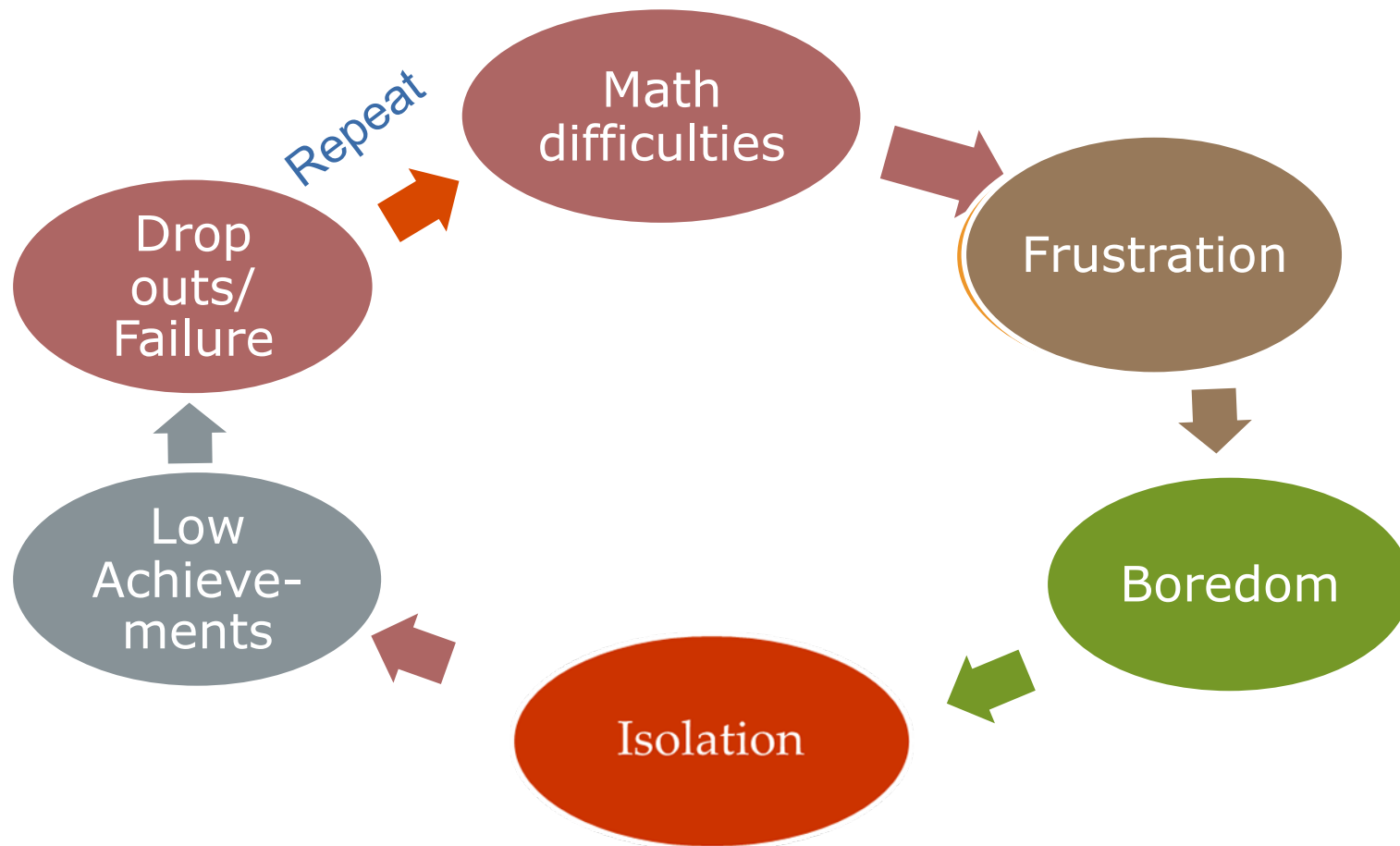
Websites Used in Teaching Fully Website Course





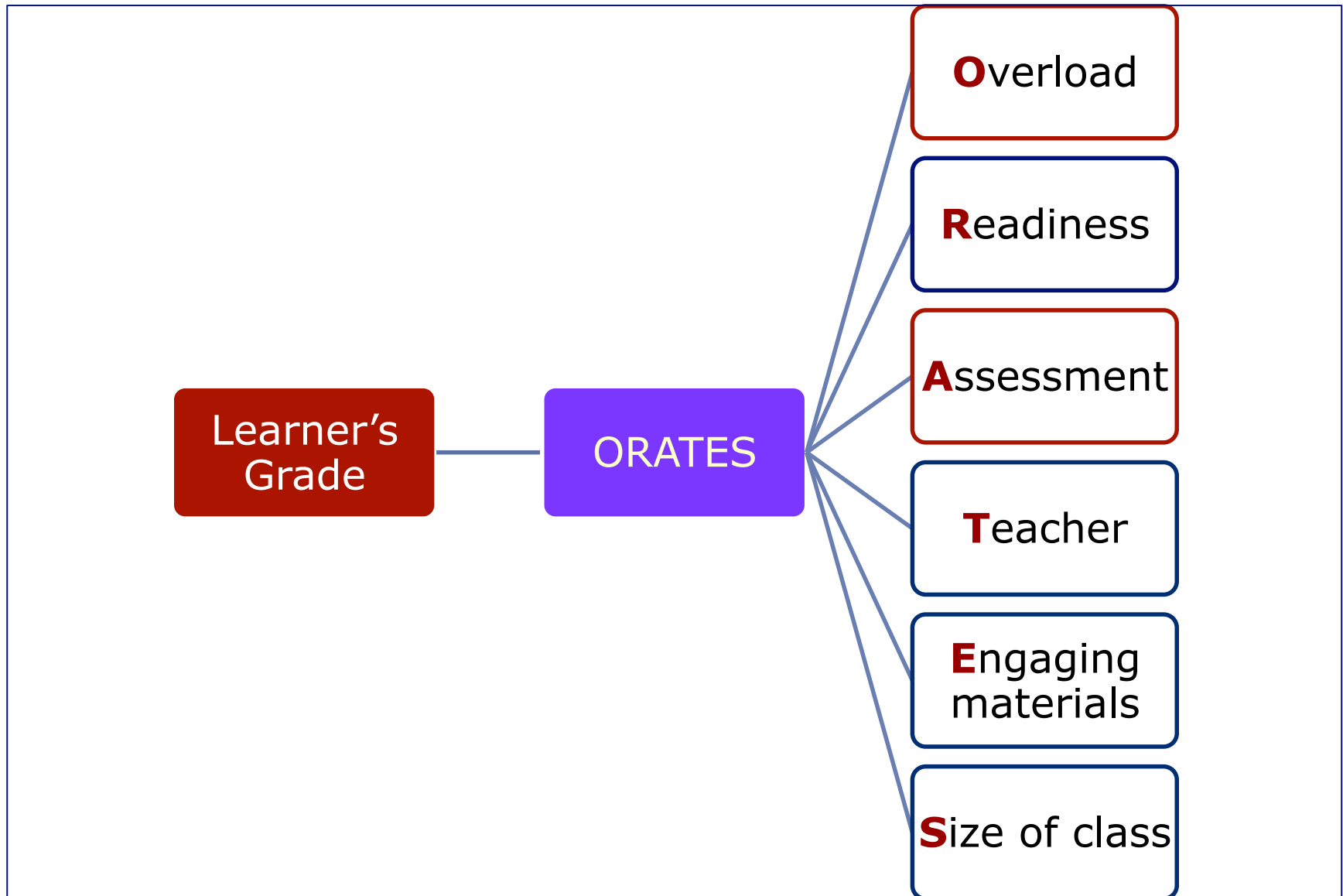
Research Findings and Their Implications

A Disconnected and Non-Supported Learner



- Engage students to stay connected and supported

Learner's Grade Depends on 'ORATES'

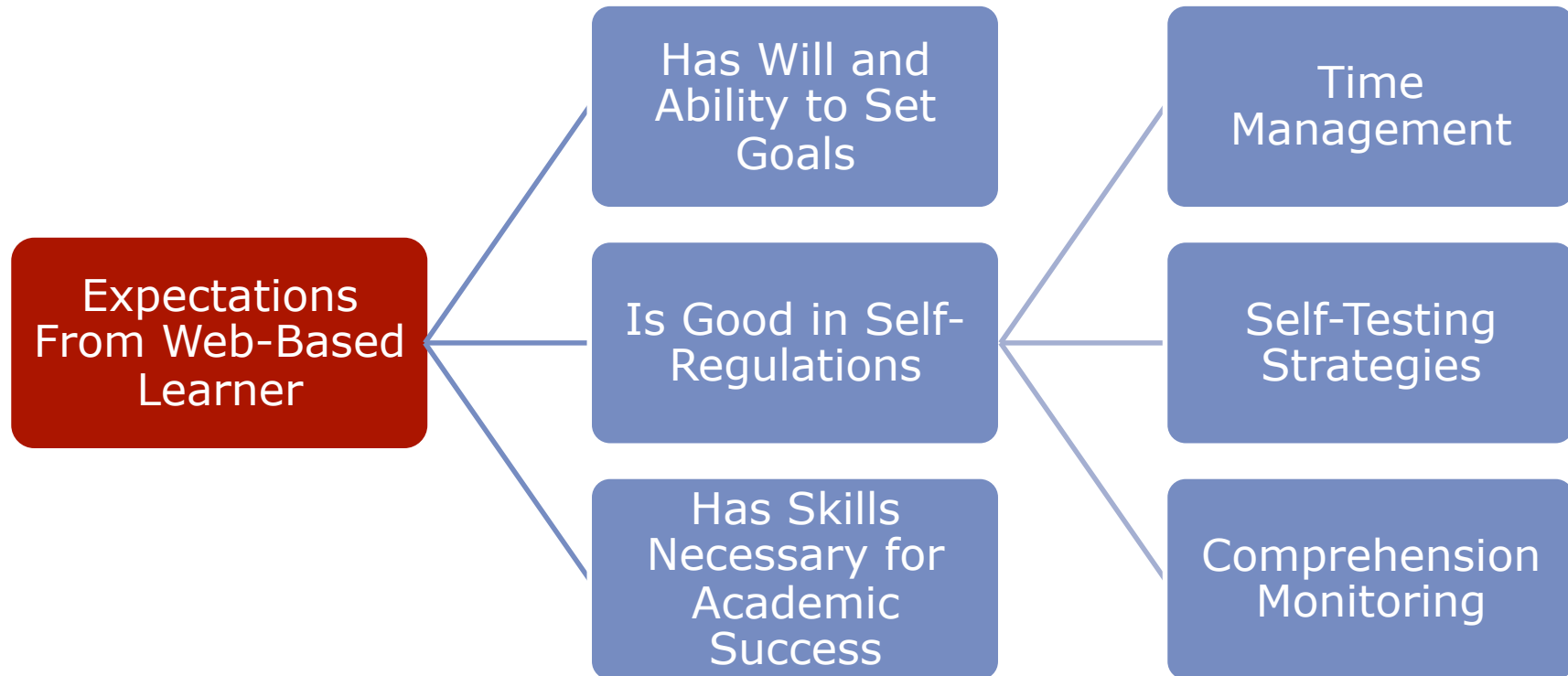




Recommendations

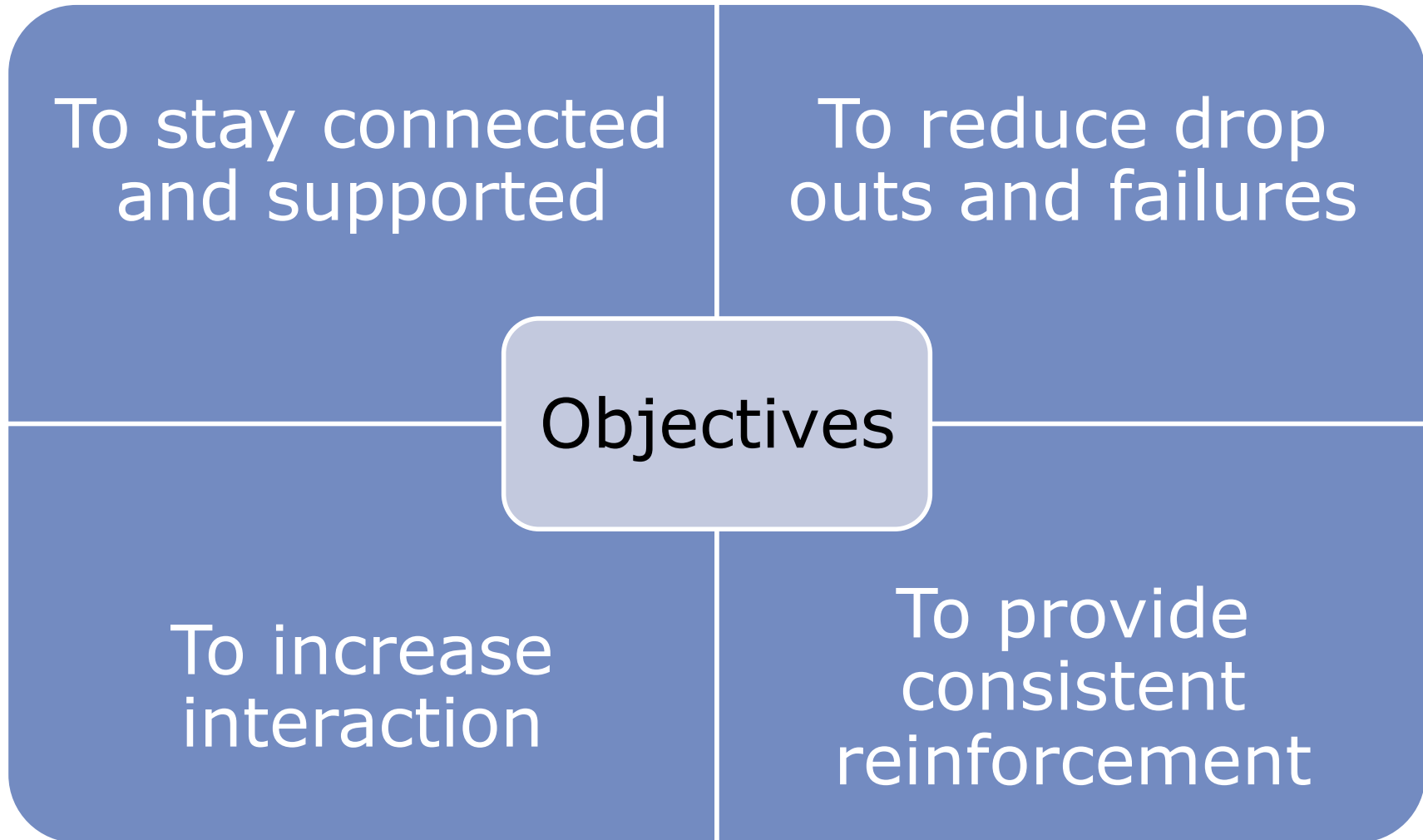
Recommendation 1

Teacher needs to help a learner to meet these expectations



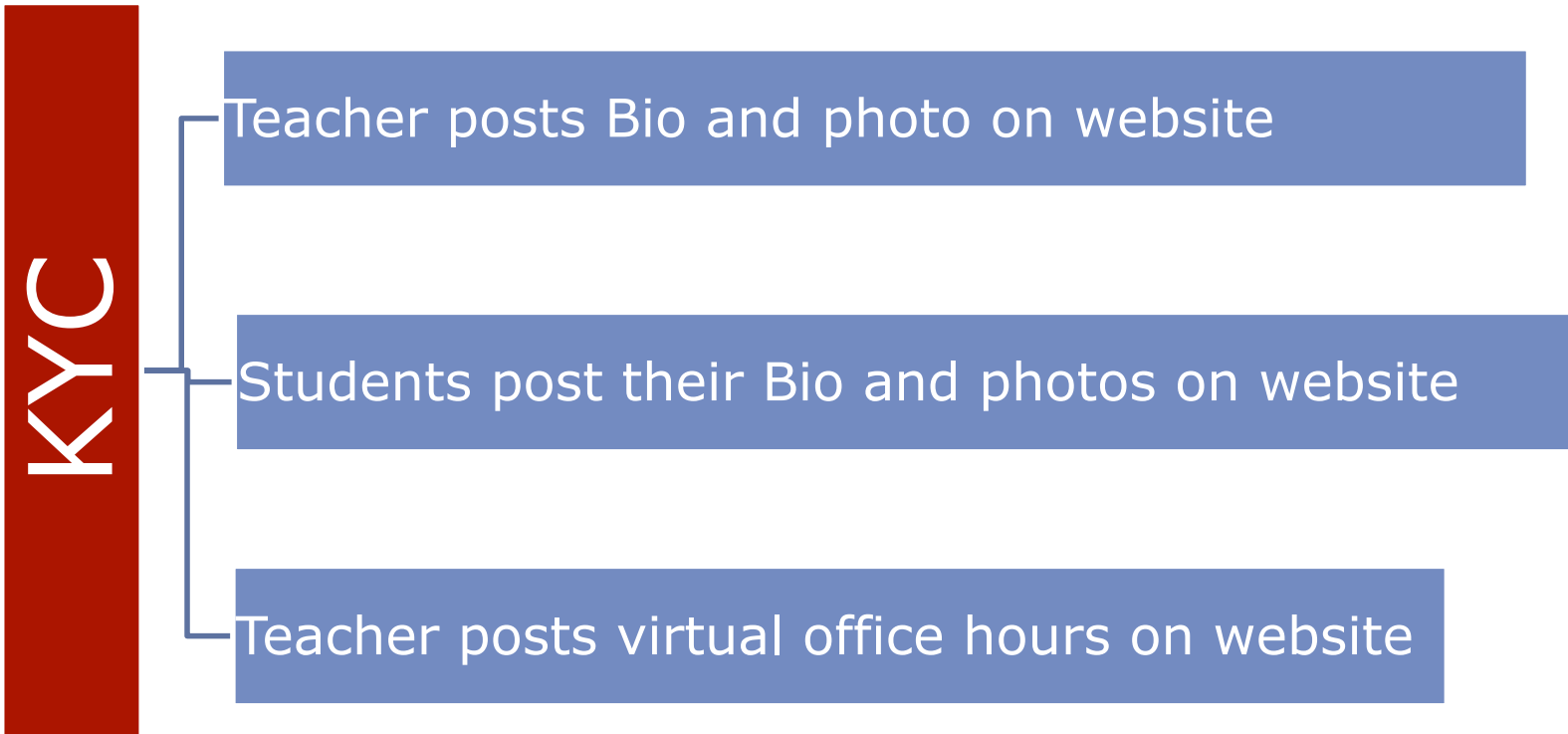
Recommendation 2

Identify the Main Objectives of Engagement



Recommendation 3

Know Your Class (KYC)



Recommendation 4

Engagement Depends on Category Weights

Category	Weights in previous 4 semesters	Weights in current semester
Discussion Board (Coffee shop)	0%	10% ↑
Home works	30%	15% →
Virtual group tests	0%	5% ↑
Weekly tests	15%	20% ↑
Proctored exams	55%	50% ↑

Findings: Effective student engagement went up from 30% in previous semesters to 75% in current semester.

Recommendation 5

Establish A Comprehensive and Effective Syllabus for web-based course for Increased Engagement

syllabus

Set the tone for website course

Consider using a graphic syllabus to support your syllabus

Establish effective web-based protocols

Articulate specific learning outcomes for the course

Communicate what, when, and how students will learn

Communicate course policy and expectations in terms of student responsibilities

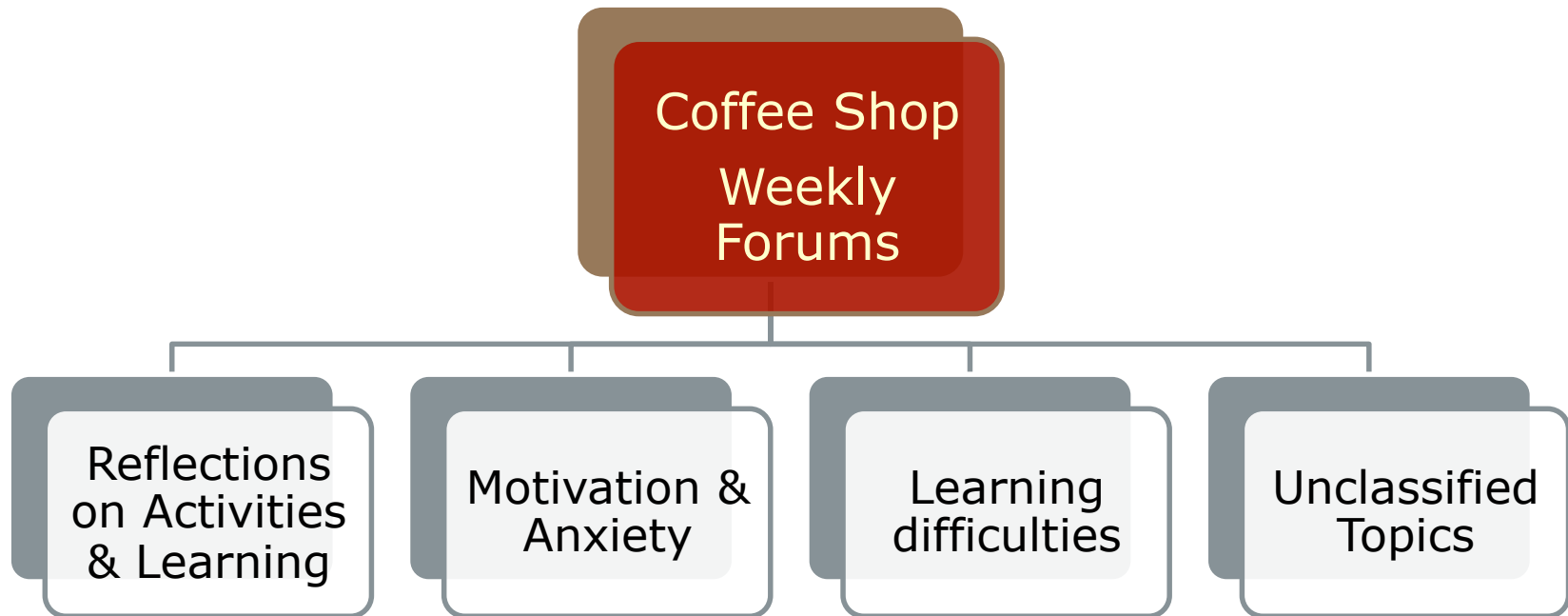
Clearly state method of student learning and achievements

Effective weights for assessment categories that enhance learning and grades

Tips to help students to get successful in the course

Recommendation 6

Discussion Board (Coffee Shop)



Notes:

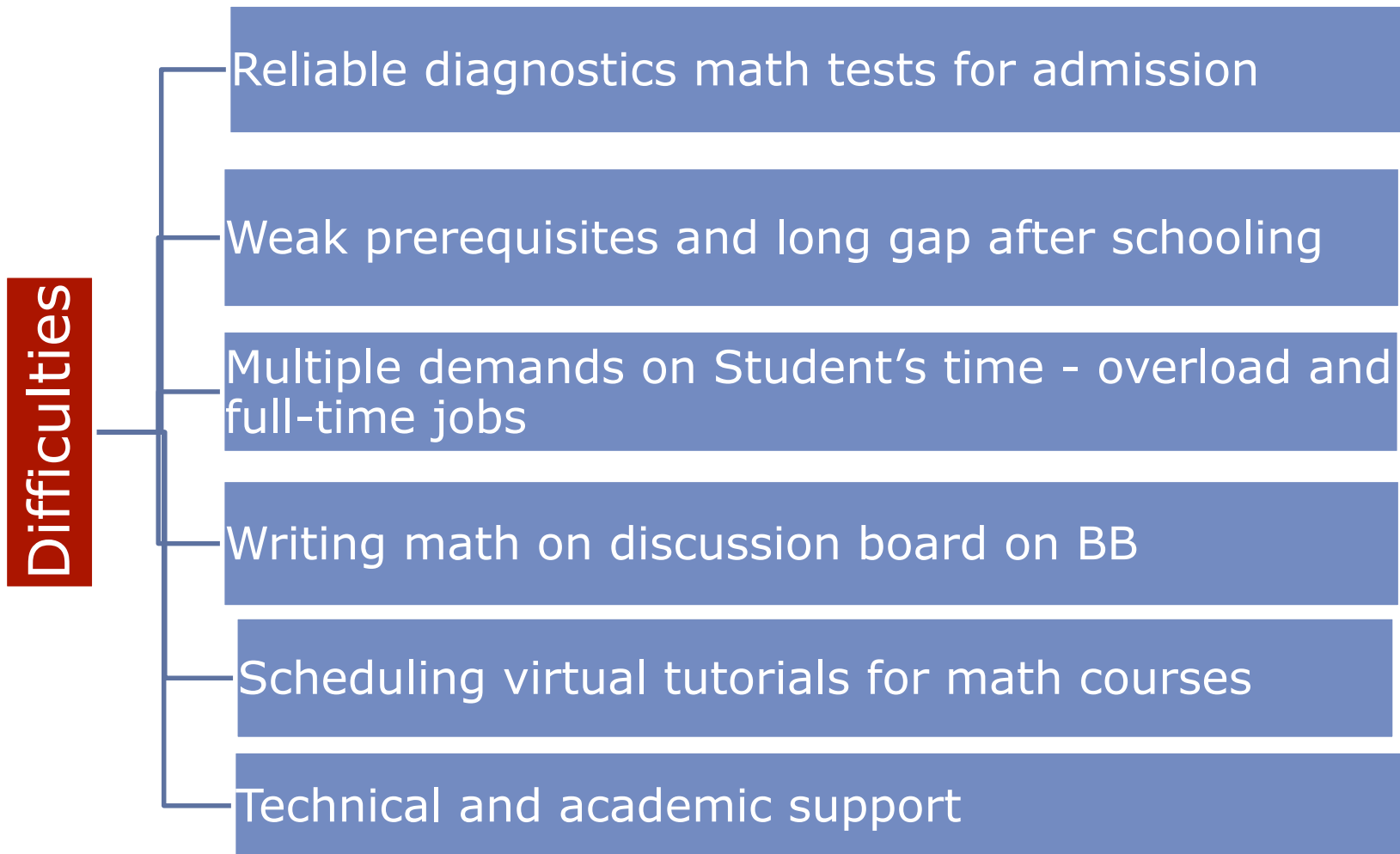
1. Post at least two new weekly postings in one or more forums
2. Post responses in timely manner to student's and teacher's postings
3. Check emails on daily basis



Challenges and Conclusions

Challenges

Difficulties in Teaching web-based math classes





THANK YOU
