

Learning Environments

A FORUM ON THE ACADEMIC CALENDAR

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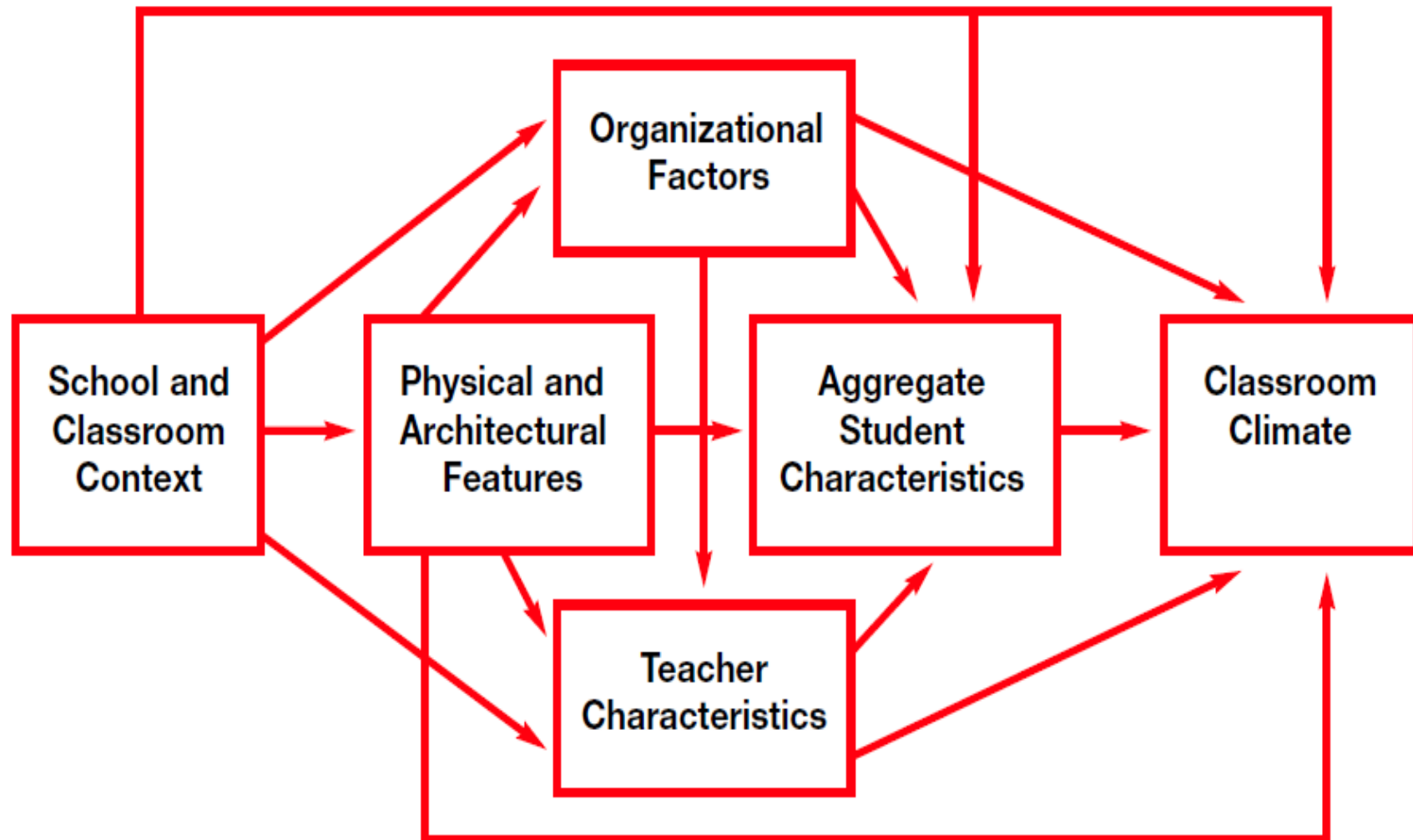


LEARNING ENVIRONMENT DEFINED

(UNESCO-UIS, 2012)

“The complete **physical, social, and pedagogical context** in which learning is intended to occur...conceptualized in relation to their **impact on learning processes and outcomes both in cognitive and affective domains**” p.12

Model of the Determinants of Classroom Climate (Moos ,1979)



3 Points

- Summer Breaks
- Climate
- Interrupted Semester

No Long Summer Break and Modified School Calendars

(Cooper et.al., 2003)
US, Grades K-12

Proponents	Opponents
Continuous instruction is best	Real issues in education are not addressed
Options for preventing burn-out	Teacher burn-out
Same balance in family-school time	Opportunity loss for family-child time
Adjusted job schedules for students	Loss of summer jobs for students
	Income loss (parks, camps, day care associations)

The Physical Environment

RAIN	HEAT
Safety Class Suspensions Equipment	Safety Electricity Equipment

The Spacing Effect (David Gilden, www.saveiowasummers.com)

- learning episodes are interrupted by breaks
- “learning at 2-month intervals produced 4x greater retention after a 5-year period than learning at an interval of 2 weeks... requires more effort (Bahrack et al., 1993:
 - **Consolidation:** Encoding, Storage and Retrieval
 - **Familiarity Bias:** Breaks for greater understanding
 - **Mental Set Release:** Review with a fresh mind

The Zeigarnik Effect

(Seifert, 1991)

- Phenomenon in which the recall ratio for interrupted tasks, in the middle or the end of task completion, is higher than tasks interrupted near the beginning.
- Disturbed unfinished jobs are better recalled than finished jobs

SPACING EFFECTS

Mean Grades: 1st Sem vs. 2nd Sem

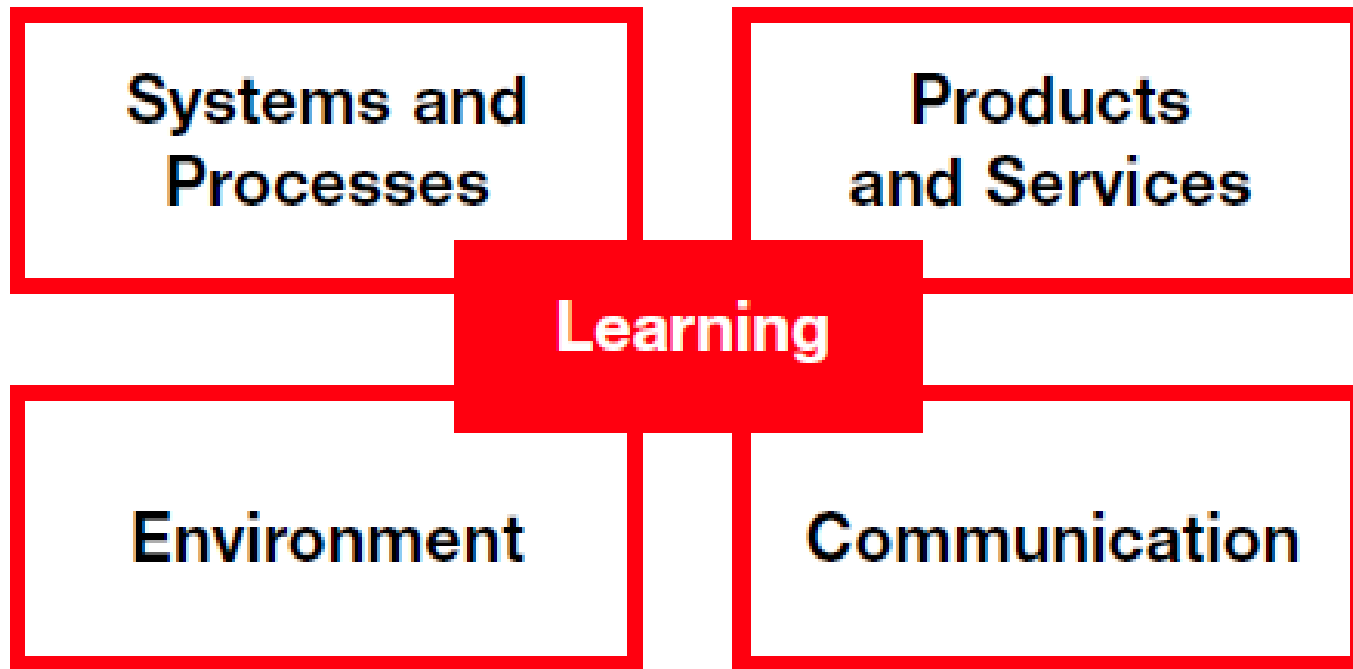
1st Sem > 2 nd Sem	Same	2 nd Sem > 1 st Sem
Fil 40	Eng 10	ES 11
Philo 1	ES 12	
Kas 1	Math 11	
STS	Math 14	
Chem 16		
Math 17		

2nd Semester and the Spacing Effect: CONSIDERATIONS

- Student's year level
- Course combination per semester
- Faculty Grading System
- SET
- Possibly linked with reasons for higher enrolment in the 1st semester than the 2nd semester

Components of Learning Environments

(Higgins, et al., Design Council)



Physical and School Built Environment

- Effect of physical environment (air, noise, heat, rain) on learning
- Different room arrangements
- Physical elements which improve comfort, well-being and attitude

Products and Services

- Teachers' role outside the classroom
- Community involvement
- Nutrition

Communication

- Effective communication with community
- Good communication within the school

Systems and Processes:

- Teachers' attitudes and behaviour
- Genuine involvement of users empowers individuals
- Staff moral is crucial
- Different users have different perspectives, often differ from designer's perspective

Recommendations from the Studies

- “ (in the US) adoption of school calendars has been driven primarily by economic factors than by educational implications.” (Cooper)
- Improving negative elements in the environment has significant benefits; but managing the change process is more important... (Higgins, et al.)

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Thank you!

