

University of New Mexico

UNM Digital Repository

University Libraries & Learning Sciences Faculty
and Staff Publications

Academic Department Resources

10-28-2020

Online Course Design for Student Centered Learning

Charlotte Nirmalani Gunawardena
University of New Mexico, lanl@unm.edu

Neelakshi Chandrasena Premawardhena
University of Kelaniya (Sri Lanka)

Follow this and additional works at: https://digitalrepository.unm.edu/ulls_fsp



Part of the [Curriculum and Instruction Commons](#), and the [Online and Distance Education Commons](#)

Recommended Citation

Gunawardena, C. N., & Premawardhena, N. C. (2020, October 28). Online Course Design for Student Centered Learning [Invited Presentation for Sri Lankan Universities]. Sponsored by the United States-Sri Lanka Fulbright Commission, Colombo, Sri Lanka.

This Presentation is brought to you for free and open access by the Academic Department Resources at UNM Digital Repository. It has been accepted for inclusion in University Libraries & Learning Sciences Faculty and Staff Publications by an authorized administrator of UNM Digital Repository. For more information, please contact amywinter@unm.edu, lsloane@salud.unm.edu, sarahrk@unm.edu.

ONLINE COURSE DESIGN FOR STUDENT CENTERED LEARNING

US - SRI LANKA FULBRIGHT
COMMISSION

OCTOBER 28, 2020

Charlotte N.
(Lani)
Gunawardena,
Distinguished
Professor

Organization,
Information, &
Learning
Sciences
Program

University of
New Mexico,
USA

Citation:

Gunawardena, C. N., & Premawardhena, N. C. (2020, October 28). *Online Course Design for Student Centered Learning* [Invited Presentation for Sri Lankan Universities]. Sponsored by the US-Sri Lanka Fulbright Commission, Colombo, Sri Lanka.

AGENDA

- 1.** Why do we need a paradigm Shift to Student Centered Learning ?
- 2.** What is student centered learning (SCL)?
- 3.** What's the theoretical basis for SCL?
- 4.** What are the design features of SCL?
- 5.** An example of SCL from the University of Kelaniya
- 6.** A framework for designing SCL

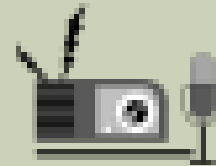
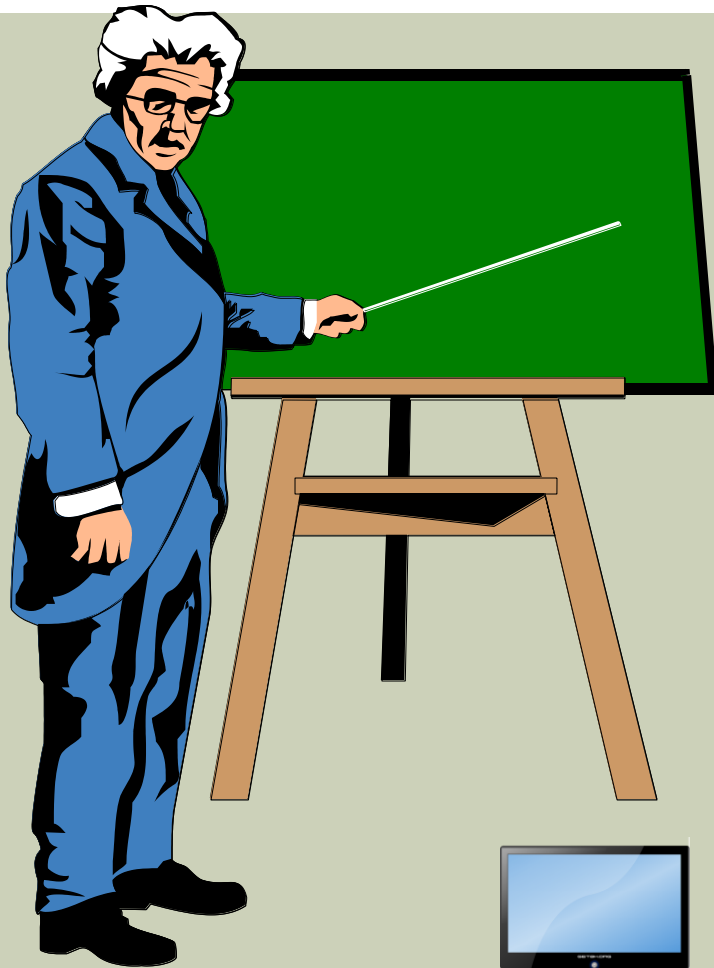
PART 1: WHY DO WE NEED A PARADIGM SHIFT?

How we learn

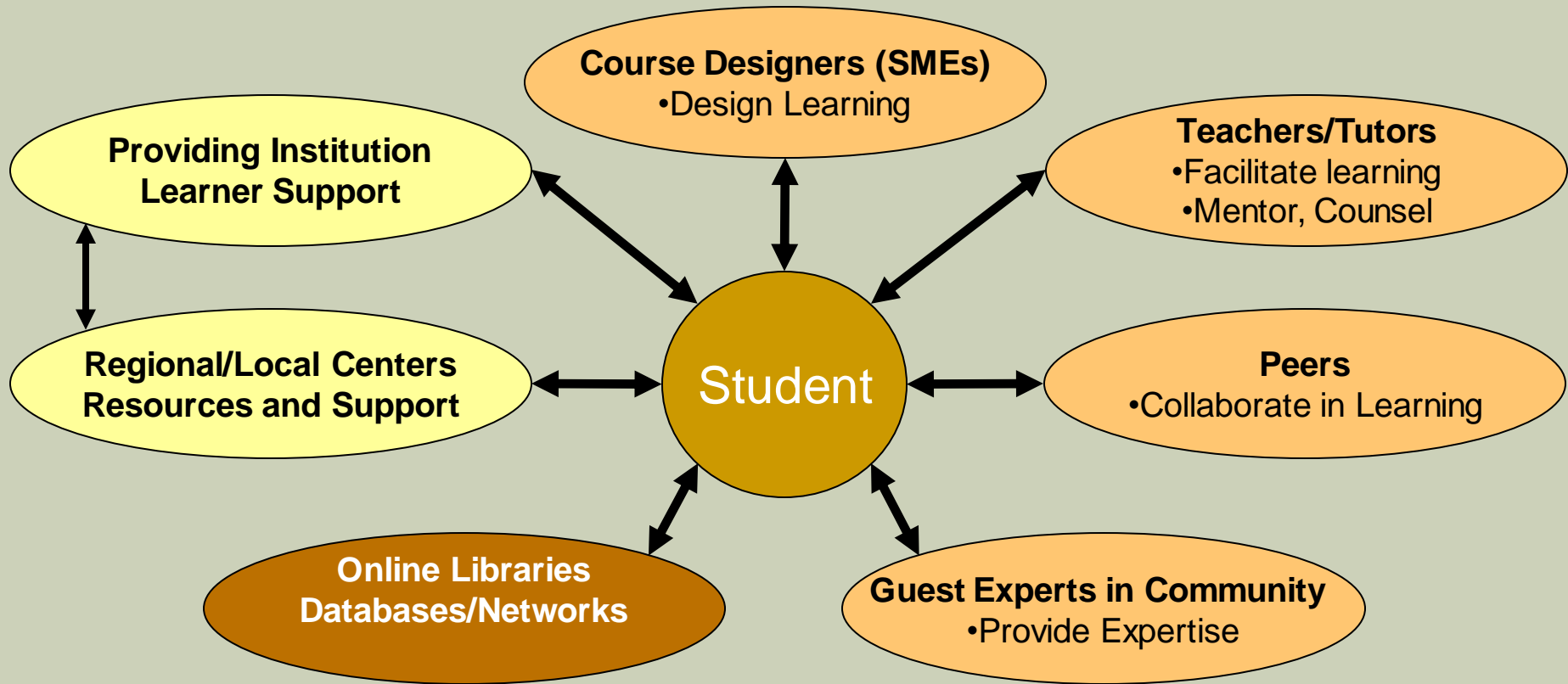
Technology
Revolution

Twenty first
Century Skills

PARADIGM SHIFT FROM LECTURES AND OTHER ONE-WAY DELIVERY SYSTEMS TO:



Networked Student - Centered Online Learning System



THE STUDENT/LEARNER

- *Who are the students?*
- *Where are they located?*
- *What do they need to learn?*
- *What is the best type of learning environment?*
- *Do they have access to technology?*
- *How will you facilitate learning?*
 - Strategies & Methods
 - Teacher's role
 - Learner's role
 - Support for learning

STUDENT CENTERED LEARNING KE & KWAK (2013)

- **Knowledge is constructed** by students & instructor is a facilitator of learning, rather than a presenter of information.
- reliance on **active** rather than passive learning
- an emphasis on **deep learning** and understanding
- increased **responsibility and accountability** on the part of the student
- an increased sense of **autonomy** for the learner
- an **interdependence** and mutual respect between teacher and learner, and other learners
- a **reflective** approach to the teaching and learning process

HOW WE LEARN: RANGE OF LEARNING THEORIES THAT SUPPORT SCL

- **Sociocultural Theory & Social Constructivism - ((Vygotsky, 1978)**
 - Knowledge co-created by negotiation of meaning
- **Distributed Cognition - (Hutchins, 1995)**
 - Knowledge is distributed in minds and tools used
- **Situated Learning - (Lave and Wenger, 1991)**
 - authentic contexts and learning in practice (Communities of Practice)
- **Transformative Learning – (Mezirow, 2000)**
 - Changes in perspectives

The Old Skillset
Know.

The New Skillset

**Filter. Think Critically. Prioritize.
Connect. Negotiate. Integrate.
Create**

***Acquiring knowledge is no longer
a sufficient learning outcome.***

THE NEW ESSENTIAL SKILLS

- ***Negotiating meaning*** within teams and groups
- Creating new, ***context-sensitive*** understandings
- Producing ***novel solutions*** to real-world problems

DESIGNING SCL ENVIRONMENTS TO FACILITATE THE NEW ESSENTIAL SKILLS

- Focus on problems, cases or questions, where learners must construct knowledge
- Assign tasks similar to real-world problems
- Provide access to resources used by professionals in the field
- Cultivate navigational, search & retrieval skills
- Generate multiple perspectives – intercultural global activities
- Create opportunities for wide-area data collection & research, e.g.: elephant human conflict
- Engage in worldwide mentoring

EXAMPLE: SCL DESIGN IN SRI LANKA NODES (2009)

Discussion		Started by	Group	Replies	Last post
Street children in the city of Colombo		Marlie Cardiff	Group2 -3	45	Lani Gunawardena Wed, 4 Jul 2007, 05:52 PM
Solving the traffic problem in Colombo		Richard Miller	Group2 -2	35	Lani Gunawardena Wed, 27 Jun 2007, 04:01 PM
garbage disposal in the city of Colombo		marie perera	Group2 -1	42	Lani Gunawardena Wed, 27 Jun 2007, 03:53 PM

WIKI FOR REPORT WRITING

Wiki for Report writing for interactive learning format

Topic : Case based reasoning activity to find a solution for street children in the city of Colombo

Background : Street children, the offspring of today's complex urban realities worldwide, represent one of our global family's most serious, urgent and rapidly growing socioeducational challenges. No country and virtually no city can escape the presence of these so-called street children. In some parts of the world, they have been a familiar phenomenon for many years. (le Roux, 1996). Population: estimated 18.6 million (1999). Cycles of violence linked to ethnic, political and economic factors experienced particularly over the last 15 years. Street children NGOs estimate 2000 street-living and streetworking children in Colombo city (with 5000 children at risk) and 2,500 outside Colombo (with 5000 at risk). Some estimates place the at-risk figures in the region of hundreds of thousands. Accurate statistical data about numbers and dispersion of street children is limited, but there is acknowledgement that the number is substantial and on the increase.

(Ref :www.streetchildren.org.uk/reports/Sri%20Lanka%20Child.doc)

Why are they on streets:

There are number reasons for children being on streets. Some of these are: poverty, family breakdown, natural disasters rebellion against their parents, insufficient income, violence including physical, emotional, and sexual abuse, political instability, urbanization. Also, psychological imbalances and mental disorders may cause the same.

Age & Places

Statistics reveal that only a handful of street children are attending schools and a majority of them are in need of a permanent shelter and a stable income to continue their education. According to a recent research conducted by the National Child Protection Authority (NCPA), a majority of street children living in Colombo are under the age group of 13 years, without a fixed abode and stable family income for their parents to nurture them. It is also revealed that most of these children lived on pavements, bus-stands or under the shade of huge trees

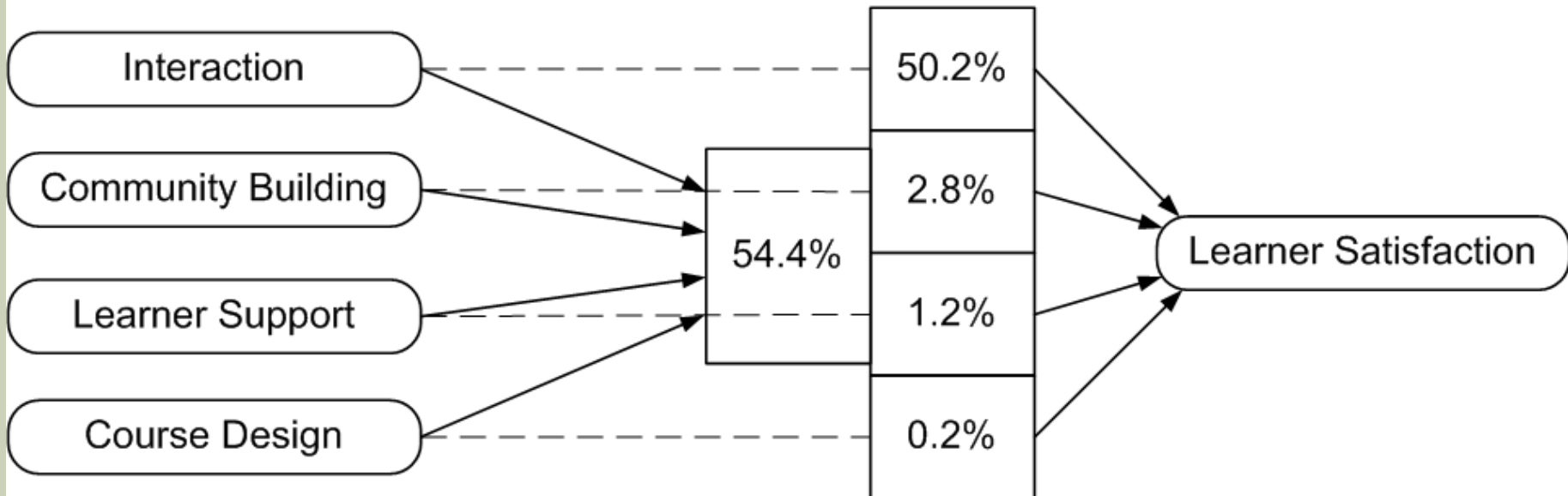
(Ref:<http://www.sundayobserver.lk/2004/07/18/new28.html>)

PREDICTORS OF SATISFACTION IN SCL DESIGN IN SRI LANKA – GUNAWARDENA & COLLEAGUES (2012)

Hierarchical Regression: 54% ($R^2 = 0.544$) of Learner Satisfaction was explained by the 4 independent variables ($F_{4, 49} = 14.317, p = .001$)

Independent Variables

Dependent Variable



RELATIONSHIP BETWEEN STUDENT CENTERED LEARNING & LEARNER SATISFACTION KE & KWAK (2013)

Results of a Structural Equation Model with diverse online students in 28 online courses indicated:

- Five key constructs of student-centered learning in online courses—
 - learner relevance
 - active learning
 - authentic learning
 - learner autonomy, and
 - computer technology competence

Predicted students' perceived satisfaction with online courses and web-based distance education at a statistically significant level.

CHALLENGES TO STUDENT CENTERED ONLINE LEARNING

- Access to technology devices and WiFi
- Learner expectations
- Large course enrollments
- Learning in a second language – advocate translanguaging, or use of full linguistic repertoire
- Adequate time to design SCL

PART 2:
EXAMPLE OF TEACHING
GERMAN ONLINE FROM THE
UNIVERSITY OF KELANIYA

Prof.
Neelakshi
Premawardhe
na

Dept. of
Modern
Languages,

University of
Kelaniya

REDEFINING TEACHING GERMAN FOR ONLINE LEARNING

- Hitherto conducted as blended learning with 50% web-based, 50% face-to-face
- After COVID-19, 100% online, using:
 - (1) Kelaniya University's cost-free data CAL (Computer Assisted Learning) platform, and
 - (2) Zoom for discussions
- For 3 groups of different competency levels, 3 hour sessions per week on Zoom, for 30 weeks
- Course units on:
 - Interpretation of non-literary texts
 - Oral & written communication skills
 - Discourse analysis

THE COLOR MODULE

22. Oktober 2020

 Was symbolisieren Farben?

PDF document Modified 21/10/20, 02:06

 Was bedeuten Farben?

What do colours symbolize?

Read 3 authentic texts from Internet resources on:

1. The meaning of colours in different cultures
2. The power of colours
3. The use of colours in advertising



READ 3 TEXTS, PRESENT YOUR IDEAS ON QUESTIONS, & PROVIDE A WRITTEN & ORAL SUMMARY

Skills	Questions
Critical thinking, logical reasoning	1. What do colors symbolize?
Reflection, decision making, critical thinking, emotional reaction, oral & written communication	2. What do colors mean to you personally? 3. What is your relationship with colors as an adult today?
Reflection on different stages in life, logical reasoning, critical thinking	4. How did you feel about colors in the past as a child and adolescent? Were the colors important to you back then?
Reflection logical reasoning,, critical thinking, appreciation	5. Which colors do you choose? E.g. flowers, clothing, houses
Reflection, intercultural competence	6. Colors have different meanings in different cultures. What do different colors symbolize in Sri Lanka? Explain with examples
Intercultural competence, learner autonomy through independent research	7. Search for the meaning of colors in Asian and European countries on the Internet and present the results

POSITIVE ASPECTS OF ONLINE LEARNING

- Motivation of students – Various ways they accessed the sessions
- Self reflection – cultural aspect
- Increased self esteem
- Enhanced language competence
- Critical thinking and logical reasoning
- Awareness and appreciation of one's surroundings
- Additional skills acquired – IT skills, presentation skills, team work & sharing
- Testimonies from staff and students
- Closer connection with students (bridging the emotional distance)
- Student testimonies - online is a conducive learning environment & better

Appreciation of One's Surroundings



REFLECTING ON THE ENVIRONMENT



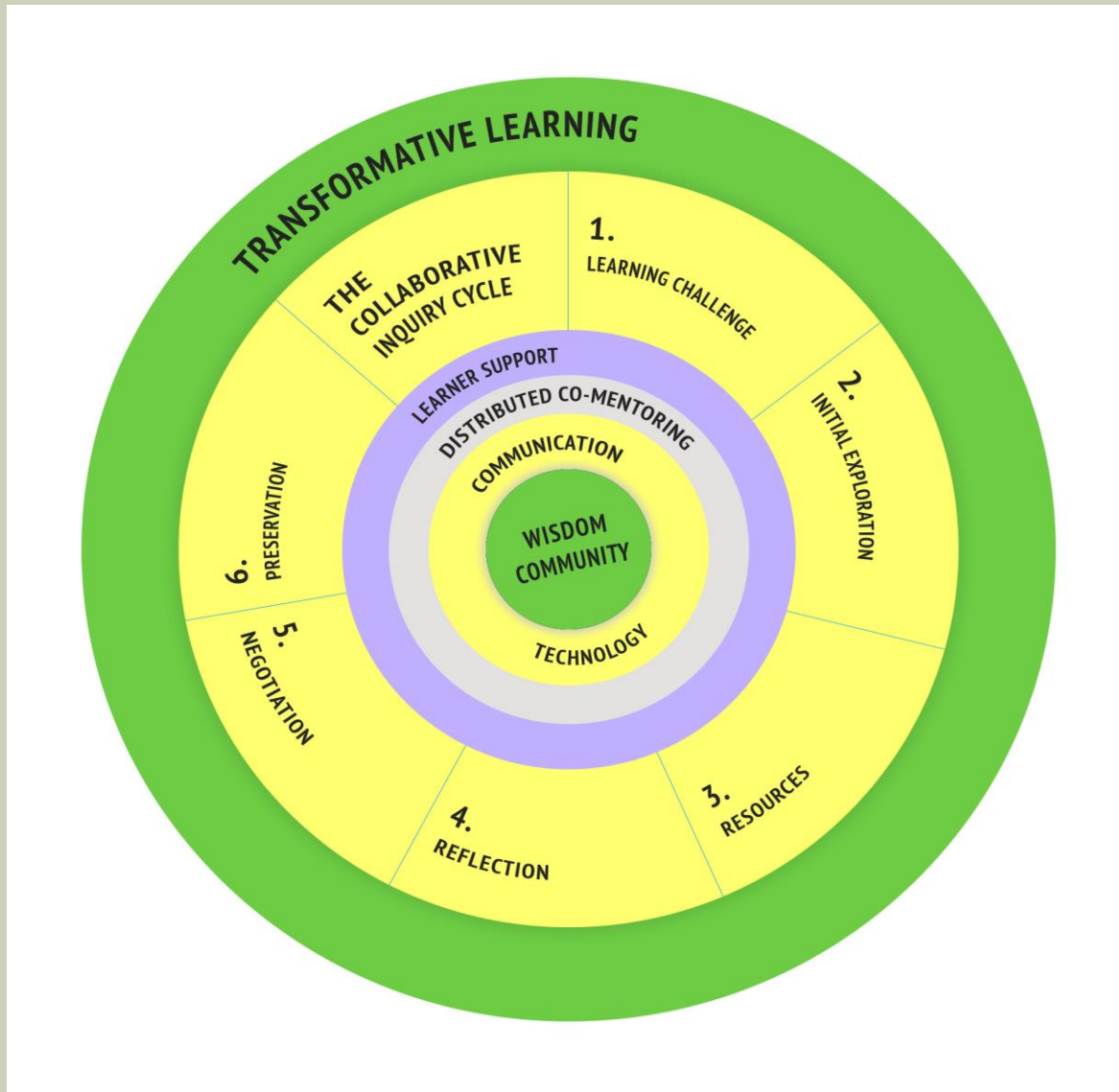
Appreciating an Abundant Harvest



PART 3:

HOW CAN WE DESIGN STUDENT CENTERED LEARNING?

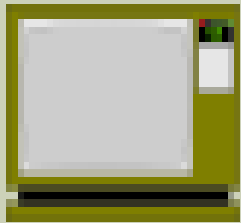
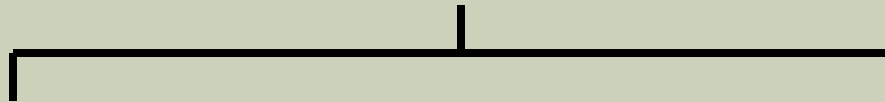
**The WisCom
Instructional
Design
Framework –
Gunawardena,
Frechette, &
Layne
(2019)**



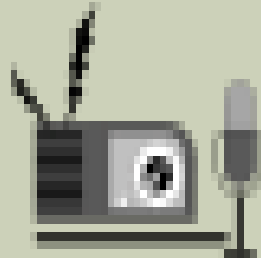
From: Gunawardena, Frechette, & Layne (2019)

Social Presence (SP)

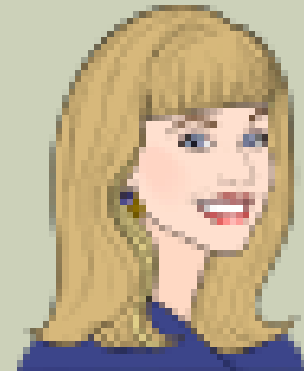
Degree to which a person is perceived as a “real person”
in mediated communication



Intimacy
(SP of Medium,
differs in different
media)
TV vs. Audio
Non-verbal cues



Immediacy
(psychological
distance
of Communicator,
differs in same
medium)



Non-verbally:
•formality of dress

•Verbally: aloofness

Figure 15.9. Directions for the Group Inquiry Process (Gunawardena, Frechette & Layne, 2019)

CIC Process	Directions for Writing a Grant Proposal
Learning Challenge	Read the RFP (Request for Proposals) and collaboratively determine the focus and goals of your grant proposal
Initial Exploration	Share your initial thoughts and experiences. Develop a list of learning issues to be researched, develop a table of challenges and culturally appropriate solutions, and decide on the roles you will undertake: Context & culture expert; subject matter expert; communicator, budget expert, designer, technology expert, technical writer, etc.
Resources	Explore necessary resources and contact persons, read the resource provided, and help each other with finding necessary resources
Reflections	Share your resources, contribute from several perspectives, reflect, restructure, and innovate
Negotiation	Negotiate perspectives, develop consensus on the innovative solution, and write the grant proposal
Preservation	Post grant proposal in Knowledge Artifacts Forum. Reflect on your own group's inquiry cycle and share your process in a concept map. Provide feedback on grant proposals developed by your peer groups. Discuss implementation of solutions and future research

Learning is a process that happens both individually, via self-initiated exploration, and collectively, via sharing, questioning, and providing feedback.

The teacher (or facilitator) becomes both guide and moderator and, at times, co-learner.

We see wisdom as a synthesis of perspective, insight, flexibility, and humility (Gunawardena et al., 2004), and we stipulate that wisdom can be observed both in individuals and in group dynamics.

REFERENCES

- Gunawardena, C. N., Frechette, C., & Layne, L. (2019). *Culturally Inclusive Instructional Design: A Framework and Guide for Building Online Wisdom Communities*. New York: Routledge.
- Gunawardena, C. N., Jayatilleke, B. G., Fernando, S., Kulasekera, C., Lamontagne, M. D., Ekanayake, M. B., Thaiyamuthu, T. (2012). Developing online tutors and mentors in Sri Lanka through a community building model: Predictors of satisfaction. In *Proceedings of the International Conference on Advances in ICT for Emerging Regions* (pp. 145-155). doi: [10.1109/ICTer.2012.6421413](https://doi.org/10.1109/ICTer.2012.6421413)
- Gunawardena, C. N., Jennings, B., Ortegano-Layne, L., Frechette, C., Carabajal, K., Lindemann, K., & Mummert, J. (2004). Building an online wisdom community: A transformational design model. *Journal of Computing in Higher Education*, 15(2), 40-62.
- Hutchins, E. (1995). How a cockpit remembers its speeds, *Cognitive Science*, 19, 265-288.
- Ke, F., & Kwak, D. (2013). Constructs of student-centered online learning on learning satisfaction of a diverse online student body: A structural equation modeling approach, *Journal of Educational Computing Research*, 48 (1), 97-122.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral Participation*. Cambridge, U.K.: Cambridge University Press.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.