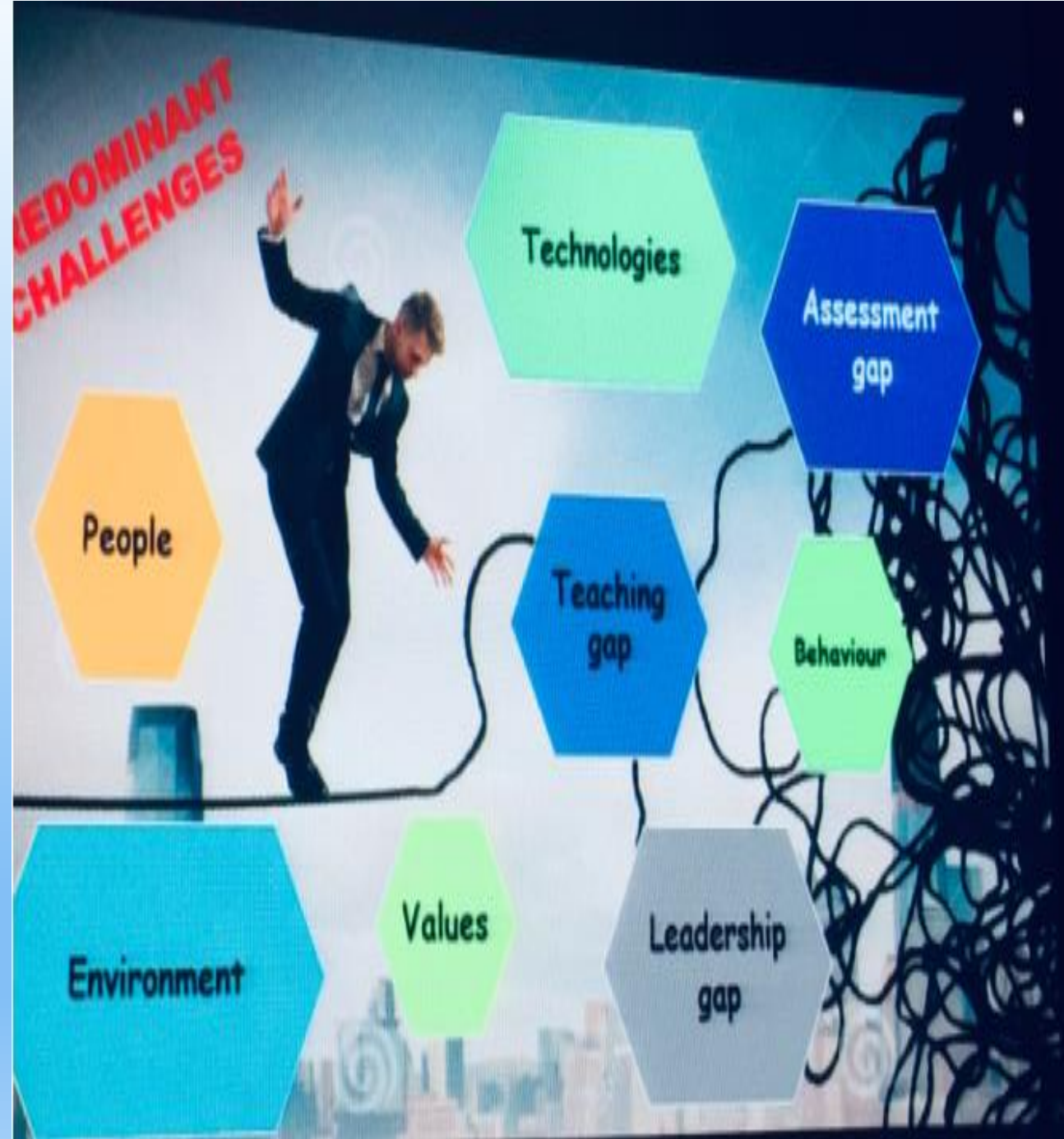


# The Literacy Research Agenda

Sherlyne A. Almonte-Acosta, Ph. D.  
Educational Research Unit  
Educational Research and  
Innovation Office

*Aligning 21<sup>st</sup> Century Literacies to Industry 4.0 through Research*

**How do we make  
our education  
responsive,  
relevant and  
appropriate to the  
challenges and  
demands of  
Industrial  
Revolution 4.0?**



**But how do we prepare our students/teachers/a cademic organization for the future in an age of unprecedented and ever accelerating change?**

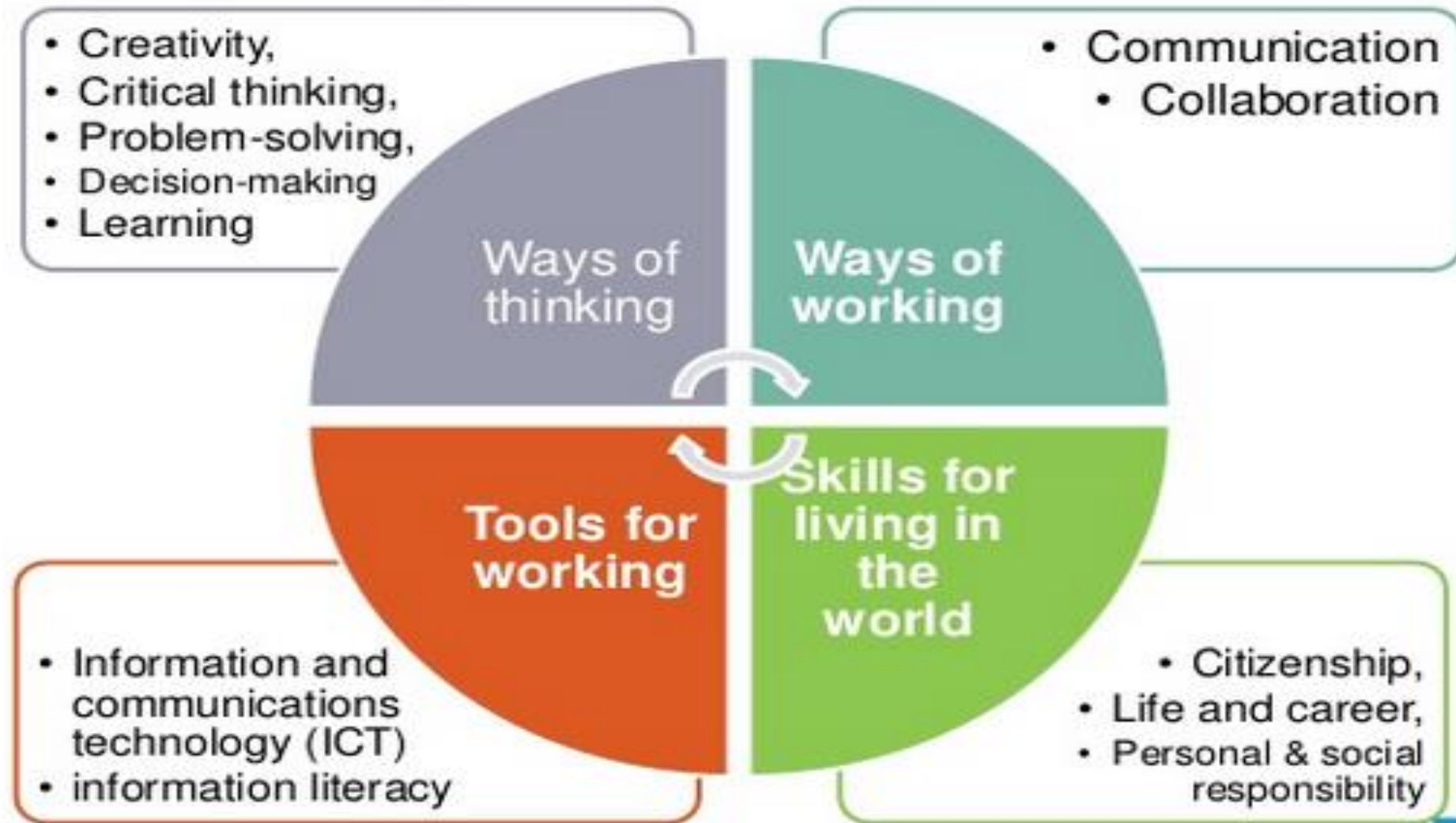




**Are We Ready?**



# FOUR CATEGORIES OF 21ST-CENTURY SKILLS



# **A new world of Teaching and Learning calls for Responsive Relevant and Appropriate Teachers Professional Development**



- 1. Adaptability**
- 2. Confidence**
- 3. Communication**
- 4. Team Player**
- 5. Continuous Learner**
- 6. Imaginative**
- 7. Leadership**
- 8. Organization**
- 9. Innovative**
- 10. Commitment**
- 11. Ability to Manage online reputation**
- 12. Ability to Engage**
- 13. Understanding of Technology**
- 14. Know when to unplug**
- 15. Ability to empower**





## Strategies to Support Social and Emotional Learning (SEL)

1. Encourage play-based learning
2. Break down learning into smaller, coordinated pieces
3. Create a safe environment for learning
4. Develop a growth mindset
5. Foster nurturing relationships
6. Allow time to focus
7. Foster reflective reasoning and analysis
8. Offer appropriate praise
9. Guide a child's discovery to topics
10. Help children take advantage of their personality and strength
11. Provide appropriate challenges
12. Offer engaged caregiving
13. Provide clear learning objectives targeting explicit skills
14. Use hands-on approach

*Source: New Vision for Education: Fostering social and emotional learning through technology, World Economic Forum.*







volatility  
uncertainty  
**VUCA**  
complexity  
ambiguity



# How to Manage in a VUCA World



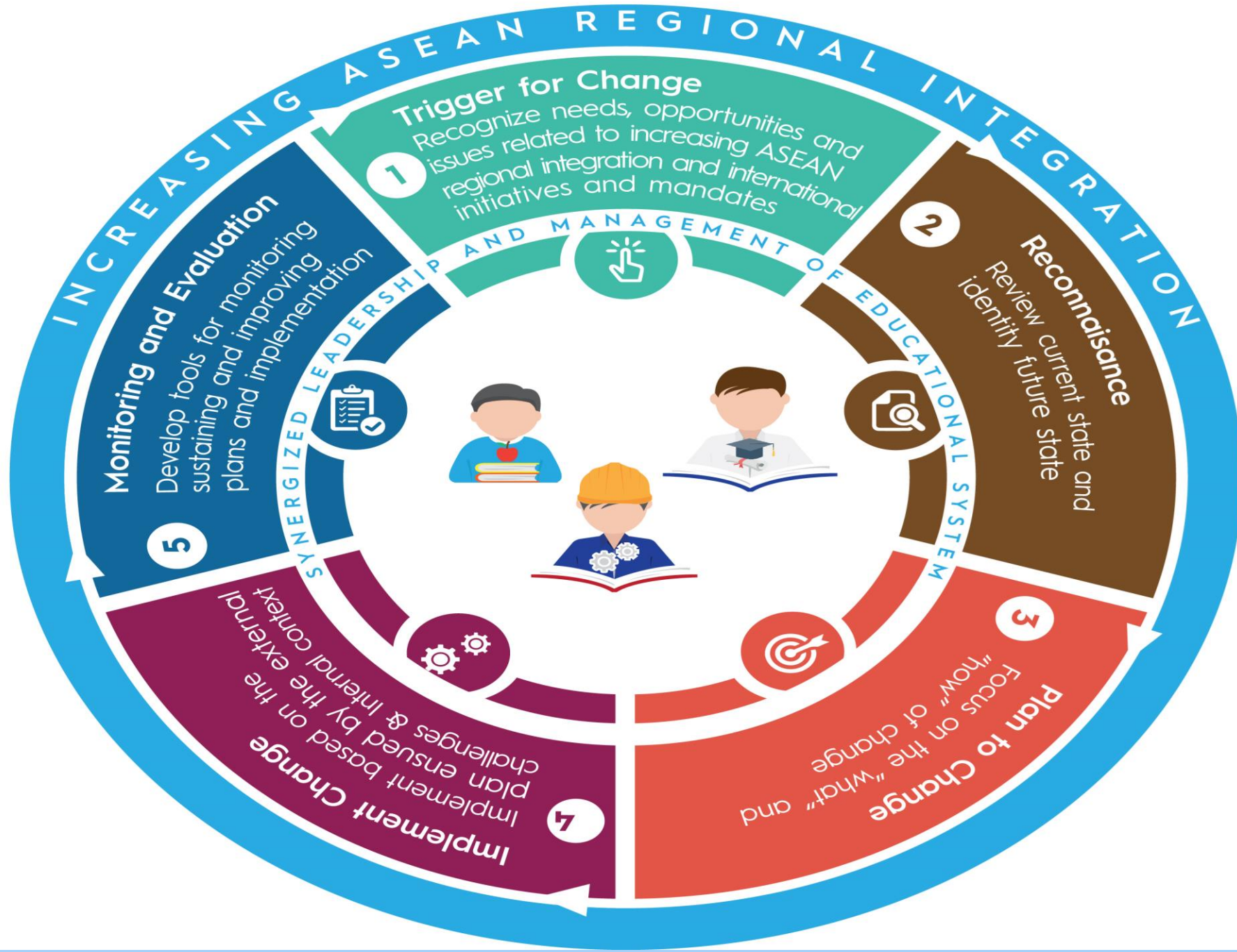
# Malaysia





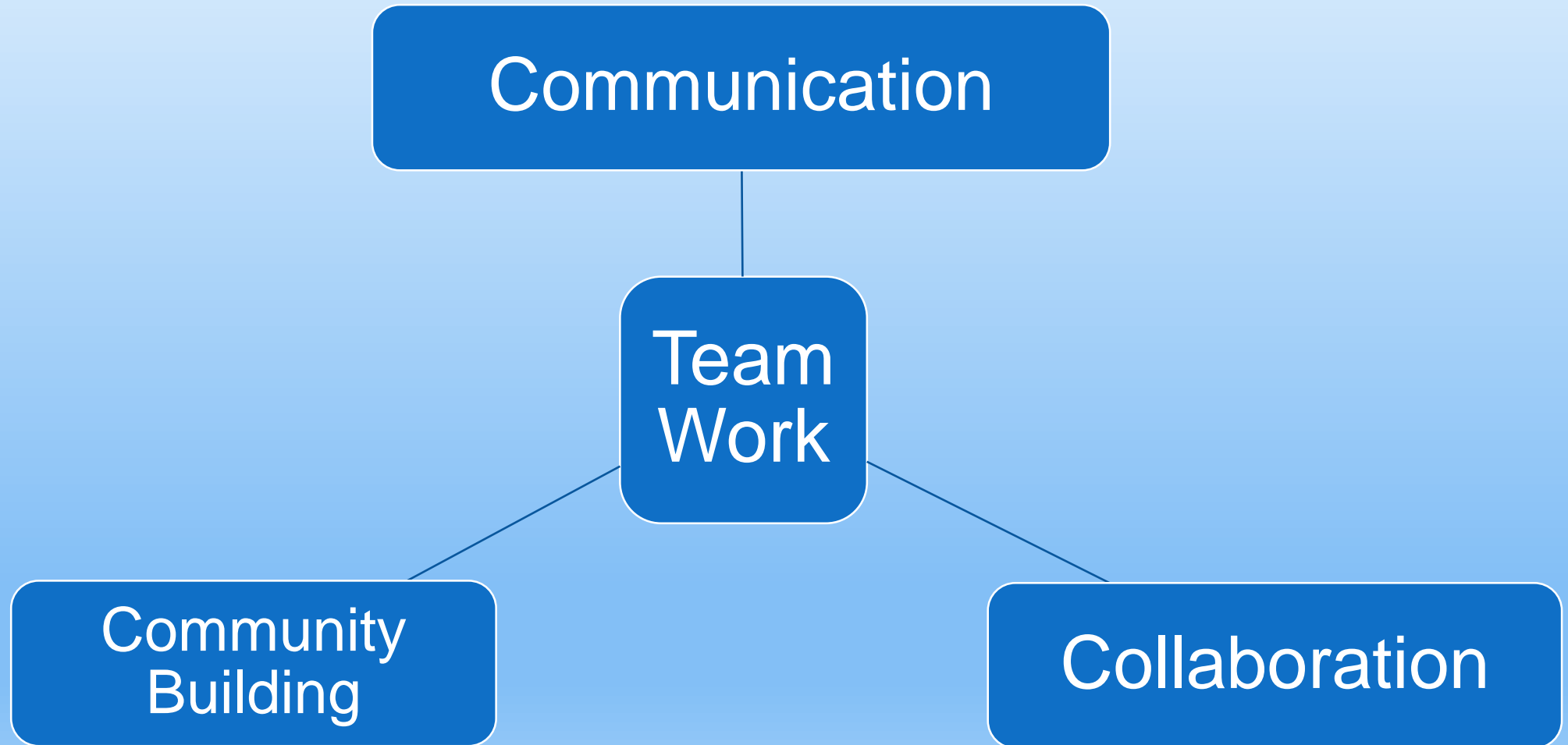
# Thrust of neighboring countries







# Challenge in Leadership



# Challenge in Leadership



# A shift of Paradigm

VUCA

**V**olatility



**V**ision

**U**ncertainty



**U**nderstanding

**C**omplexity



**C**larity

**A**mbiguity



**A**gility

## **On Teacher Development:**

- 1. What qualifications and competencies are required and needed by teachers to prepare our learners to the demands and challenges of the Industrial Revolution 4.0?***
- 2. What kind of capacity-building activities are necessary and most effective for teachers in addressing skill gaps and enabling students to keep up with the changing nature of future workforce?***
- 3. What mechanism should be in place to promote the wellbeing of Teachers amidst rapid technological advancement?***
- 3. How can motivation and commitments of teachers be sustained in in the VUCA world?***



## **On Teacher Development:**

***4.How would the teachers enable the students to approach complex challenges and changing environment as ensued by the IR 4.0)?***

***5.How can we develop an effective professional development of teacher education that would lead to a better program development and implementation?***

***6.In the world that is highly wired or interconnected, how can we develop a professional learning community?***

***7. How can we best prepare teachers in the VUCA word?***

# **On Leadership:**

**1. In what better ways can planning for IR 4.0 be done in the Department of Education?**

**2. How can internal and external partnerships be maximized to address the needs for Industrial Revolution 4.0?**

**3. How can DepEd Plan for the so-called Education 4.0 as a response to IR 4.0?**

# Continuing Challenge





A photograph of a dense forest with large, gnarled trees and a path leading into the distance. The trees have thick, textured bark and the path is a narrow dirt road winding through the forest. The lighting is warm and golden, suggesting late afternoon or early morning. The text is overlaid on the upper half of the image.

We can only see a SHORT distance ahead,  
but we can see

PLENTY

there that needs to be done.

*Alan Turing – British Computer Scientist*



**“Gone are the days of complacency,  
inevitably we need to reskill, upskill,  
upscale to be responsive and relevant”**

• SAAA

# References

Cox, J. (n.d.) 15 Professional Development of Modern Teachers. Downloaded from <https://www.teachhub.com/15-professional-development-skills-modern-teachers>

Paul, S. (n.d.) 21<sup>st</sup> Century Learning. Downloaded from <https://www.knolskape.com/blog-21st-century-learning-the-effects-of-ir4-0-globalization-the-changing-workforce-and-shorter-shelf-life-of-knowledge/>