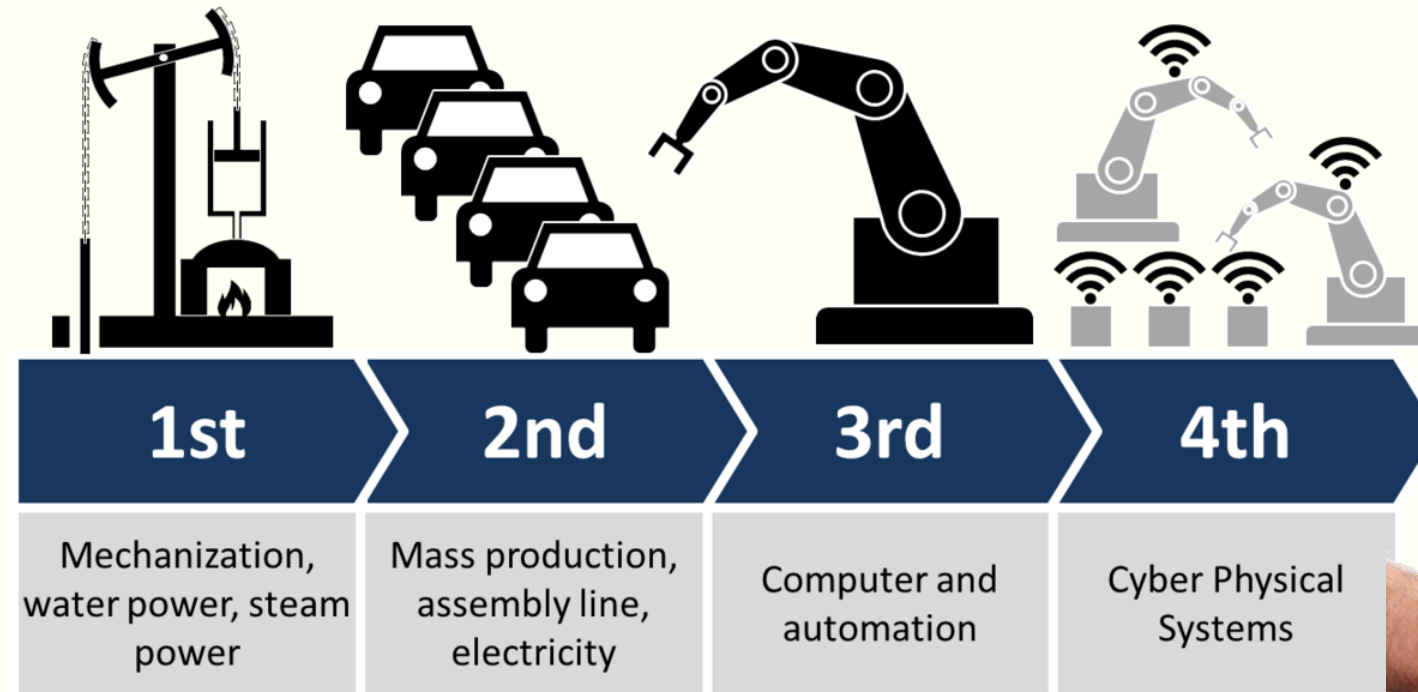# BUILDING CAPACITY FOR MICRO-CREDENTIALING IN ONLINE LEARNING TOWARDS WORKFORCE DEVELOPMENT

Debra Ferdinand-James, PhD

November 5, 2020

# Digital Transformation Drives Upskilling

| 1st	2nd	3rd	4th
Mechanization, water power, steam power	Mass production, assembly line, electricity	Computer and automation	Cyber Physical Systems

Industry 4.0 requires skills such as machine learning, data mining, data visualization and robotics.

Industry 4.0: networking of industrial machines and processes through artificial intelligence fuelled by the Internet (Umachandran, Jurcic, Della Corte, & Ferdinand-James, 2019).

Global Pandemic: Need for Working & Learning Remotely
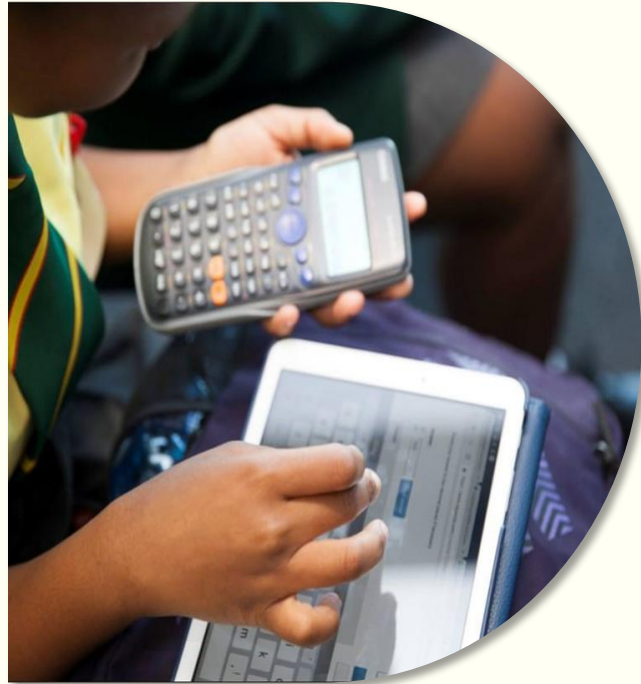
Learning and working remotely online require digital learning skills such as using learning management systems and web conferencing tools
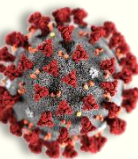
Need for Micro Credentials (MC)

FSOF004: Course Room Facilitation Techniques

The University of the West Indies

(Acclaim, 2020)

"**…** Micro-credentials verify, validate, and attest that specific skills and/or competencies have been achieved."

(The State University of New York, 2020, Section, Micro-Credentials at SUNY)

Digital badge:
- Competency-based
- Research-based
- On-Demand
- Shareable

(Digital Promise, 2018)

MURRAY STATE UNIVERSITY

ALIVE *Challenge*

BADGE OF RECOGNITION

This badge is awarded to

Debra Ferdinand - James

FOR PLANNING A VIRTUAL ACADEMY

as a participant in the Accelerated Leadership in Virtual Environments (ALIVE) Challenge facilitated by the Faculty Development Center at Murray State University

July, 2020
Date

FFWatson
Firm Faith Watson, Ph.D.
Director, Faculty Development Center

Building Capacity for MC's in Online Learning

Building Capacity in educational/training institutions: Break down programme content into smaller stackable skill sets and recognized these via micro-credentials to support life-long learning.
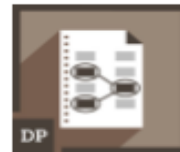
(DESIRE2LEARN, 2018)

1 Master core academic content

Making Projects Real—knowing and practicing the essential activities of each stage of a project to improve student learning and support successful outcomes for learning projects.

Mapping Facts—creating visual maps of what students think are the key facts in a topic to be learned, before and after study, to see the effects of the learning process and to deepen learning.

Mapping Processes—creating visual maps of what students think are the key processes in a topic to be learned, before and after study, to see the effects of the learning process and to deepen learning.

Mapping Concepts—creating visual maps of what students think are the key concepts in a topic to be learned, before and after study, to see the effects of the learning process and to deepen learning.

Building Capacity in industry: Partner with educational/training institutions/credentialing bodies to develop a system of micro-credentials for promoting professional growth in organisation

(DESIRE2LEARN, 2018)

① **Master core academic content**

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Building Capacity with AI in Online Learning

"Chatbot or conversational robot is a computer program capable of interacting with people using natural language." (Tamayo et al, 2020, p. 146)

Chatbots can provide 24/7 digital teaching/ learning support as

- Intelligent tutors for students
- Intelligent feedback to students
- Teaching assistant to the facilitator
- Alternative to Learning Management System
- Mentor in guiding students through information searches
- Skills practice with student for newly acquired techniques learnt in a subject areas

(Tamayo et al, 2020)
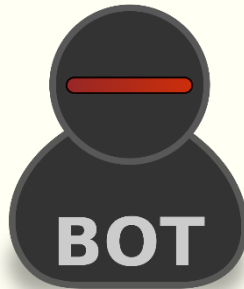
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Thank You!

Q & A

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