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DIGITALIZED AND COMPETENCE-BASED APPROACHES NERVOUSNESS IN CLASSROOM PRACTICES: A CASE OF HIGHER LEARNING INSTITUTIONS

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ABSTRACT. Innovation brought by technologies raised the demands for integrating digital tools with traditional didactics in classroom practices. Ultimately, the study in hand postulated to assess two objectives: Module instructors' capabilities in the deployment of Competence-Based Approaches (CBA) and the utilization of digital instructional resources to support teaching and learning in the selected Higher Education Institutions (HEIs). The Phenomenological action research engaged a categorical sample size of 364 instructors who were relatively selected from four zonal locations of Pwani, Lake, Central, and Southern Highlands in Tanzania. Further, the data were collected through an online Google form Likert questionnaire administered by the trained Classroom Representatives (CRs). Henceforth, Findings revealed the presence of adaptability dynamics from traditional approaches leading to nervousness; the prevailing use of the lecturing method, while digitalization exposition was limited to whiteboards as the medium of instruction. The conclusion was made on ensuring the continuous provision of training, technical, and material support to module instructors to develop Self-Determination (SD) and Self-Regulated (SR) for offsetting the dominant traditional approaches that lead to nervousness.

Keywords: Digitalize; CBA; Instructors; Learners; Nervousness

INTRODUCTION

Innovation brought by the Fourth Industrial Revolution (Industry 4.0 or 4IR) in the 21st century advocated the need to change pedagogical and didactic practices to be more personalized through the utilization of digital technology tools for the acquisition of multi-skills and competencies (Tan, 2023; Ingaldi et al., 2023). In Higher Education Institutions (HEIs), teaching and learning continue to be the pathways for producing human capital possessing current and future potential competencies. Benchmarking of Competence-Based Curriculum (CBC) with the digitalization practices in HEIs necessitated the multi-pedagogical didactics to build the constructivism practices on the self-determination (SD) and self-regulation (SR) for the development of learners' metacognitive capabilities (Rajaram, 2023; Tan, 2023; Okoye et al., 2022).

The classroom's physical contextual structure needs to be aligned with the Competence-Based Approaches (CBA) blended with digital technologies for transformative personalized learning (Kennedy, 2023; Ackah-Jnr & Fluckiger, 2023; Rajam, 2023). Advocacy for the integration of technologies and tools in the classroom settings was made by Hameed and Hashim (2022) for the succession in module contents delivering to capacitate students' cognitions into increasing the receiving, transferring, and storing of the learnt contents. Despite the learners being techno and digital invaders still, there is no assurance that the adopted digital competencies are appropriately utilized for proactive learning (Agarwal et al., 2023; Ackah-Jnr & Fluckiger, 2023).

Yet, instructors need to put efforts to familiarize, learn, and integrate digital technologies in different aspects of the professional practices. The 4IR evolutions demand that the instructors at HEIs scaffold the new culture depicted into motivational integration of multi-sourced knowledge, skills, and competencies; time management for self-determination; self-regulation; and self-assessments that assist with the technologies deployment (Lim et al., 2023; Mefferd & Bernacki, 2023). Besides, the HEIs are in the paradigm shift from traditional towards digital-blended approaches in content delivery and assessment, learners are acquainted with the practices that are built on competence-based instruction methods and resources (Mloka et al., 2023; Ghoniem & Ghoniem, 2022). Undoubtedly, the backgrounds of the instructors in HEIs from developing countries are limited in the deployment

of pedagogies and didactics for integrating digital practices in classroom settings (Tan, 2023).

CBA as the philosophy and process perpetuated to change the learners' mindsets from instructors' dependability towards skills and knowledge seekers (Banda & Nzabahimana, 2022; Wabwire, 2023)), critical thinkers (Okoye et al., 2022), innovators (Mulwa, Mwanza & Ka-sivu, 2023), collaborators and communicators (Lim et al. 2023; Mefferd & Bernacki, 2023). On a further note, CBA, as the process, focused on capacitating the classroom context in the position of the multiple approaches, methods, and resource utilization (Malhotra, Massoudi & Jindal, 2023). Besides, under the CBA, learners acquired the cognitive and metacognitive domains (Kassymova, Tulepova & Bekturova, 2023) for sorting social-economic problems for competitive advantages.

CBA is effective in being motivational to instructors and learners due to the long-lasting metacognitive effects compared to traditional instructional approaches and methods (Malhotra et al., 2023). However, in developing countries, the learning theatres and classes are not convincing, filled with piled permanent fixed chairs and tables, less or not connected to the internet, limited ICT devices, and instructors are less trained on the utilization of CBA didactics (Onwuekwe & Chukwuma 2023; Mloka et al., 2023; LeGeros, 2022). According to the Self-Determination (SD) and Self-Regulated (SR) theories, the HEIs module instructors need a paradigm shift towards full utilization of technologies to deliver the module contents by deploying CBA. Nonetheless, the SD is based on the HEIs instructors' cognitive intrinsic motivation towards the growth-driven desires, henceforth struggled to sort CBA challenges that are experienced in classroom teaching and learning (Reeve, 2023). Besides, instructors have to develop the SD desire towards the acquisition of digital technical skills and competencies that are useful in the classroom for the acquisition of the diverse needs of learners (Ng et al., 2023). The emphasis of vesting the SD in CBA as a social-cultural learning and teaching instrument for redefining the instructor's roles through fostering the learner to become independent for the learning needs, defining and utilizing diversified learning approaches and strategies for long-lasting learning outcomes (Senanayake, 2023, Garnham & Gowers, 2023; Engelbrecht et al., 2023). Seemingly, instructors as subjects in the classroom teaching and learning activities require orientation and training to possess full autonomy in CBA practices (Resch et al., 2023).

The acquisition of individual influential achievements within the complex teaching and learning environment for future well-being is guided by the SR (Lim et al., 2023). Certainly, CBA methods are capable of catalyzing the SR through the module instructors intrinsically and extrinsically being motivated and obliged to manage the teaching and learning process (Senanayake, 2023; Malhotra et al., 023). Despite the advantages of SR, instructors possessed limited pedagogical backgrounds and had low motivation to even promote the familiar CBA instructional methods and digital resources during the module content delivery in the classrooms (Mefferd & Bernacki, 2023). Moreover, the SR process phases- preparatory (before), performance (during), and self-reflection (after) are influential in changing the existing module instructors' facilitation behaviors articulated into traditional approaches (Saint et al., 2022; Park, Ifenthaler & Clariana, 2023).

Classrooms continue to be the constructivist social-cultural entity fostered by SR to embrace formations of individuals or groups as social learning units toward achieving a set of teaching and learning goals (Shah, 2022). Still, Park et al. (2023) insisted that the module instructors at HEIs are facing difficulties in mainstreaming CBA due to their readiness for engaging in the reflexive thoughts for planning and implementing multiple actions in classrooms. Nonetheless, the study aimed to assess the nervous module instructors faces in nervousness in surpassing traditional teacher-centeredness approaches towards CBA methods integrated with the digital instruc-tional resources through meeting the objectives of: (1) Determine the existing instructor's nerv-ousness in deploying CBA instructional methods, and (2) Explore the instructor's nervousness in integrating the digital instructional resource to support teaching and learning in the selected HEIs.

METHOD

A phenomenological action research design was employed to assess the nervousness in the deployment of the digitalized classroom practices in four selected HEIs located in the zones of Pwani, Lake, Central, and Southern Highlands in Tanzania. The training was conducted for 364 module instructors distributed into Pwani (205), Lake Victoria (34), Central (103), and Southern Highlands (22) on how to use the digital resources, integrated with the Competence-Based Education and Training (CBET). Module instructors were directed to commence delivering the module contents in the classroom, deploying any of the twelve (12) CBET instructional methods and seven (7) digital instructional resources. Secondly, the Class Representatives (CR) were trained on the phenomenon to be ranked and procedures for collecting the data as blind observers. Data were

collected at each time when the module instructor entered the classroom for teaching and learning processes. The CRs were engaged in data collection through the online Google Likert questionnaire form, which was developed to assess the instructors' adaptability of the new approaches relative to the common and familiar lecturing and whiteboard after being exposed to the training. The engagement of CRs in gathering data helped to collect rich data for unbiased exploration of the sample studied. Henceforth, the data were analyzed through Excel and presented in Figures. The involvement of CRs was articulated in ensuring the credibility and trustworthiness of the findings relative to the Self-Determination Theory (SDT) and Self-Regulated Learning Theory (SRL) attributes.

RESULT AND DISCUSSION

This section presents the results of research and discussion in one unit, so that the author does not need to make separate sub-chapters between results and discussion. This section must be the most numerous, at least 60% of the entire body of the article. The research results presented in this section are "net" results. Data analysis processes, such as statistical calculations and hypothesis testing, do not need to be presented. Only the analysis results and the results of hypothesis testing need to be reported. Research results can be supplemented with tables, pictures, and graphs to clarify the presentation of research results verbally. Tables and graphs should be commented on or discussed.

The findings on the instructor's nervousness levels on deploying CBA instructional methods, and (2) Explore the instructor's nervousness in integrating the digital instructional resource to support teaching and learning from four zones selected HEIs are hereby presented.

Instructor's Nervousness in CBA Methods

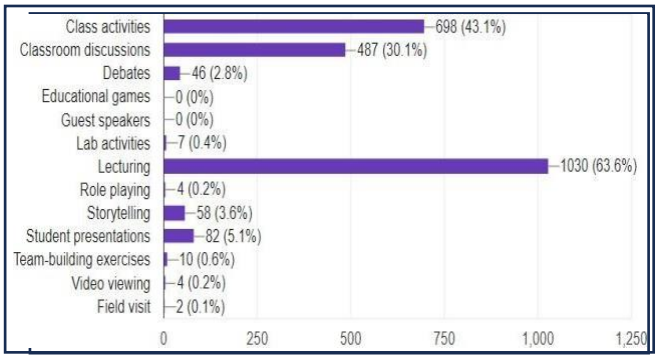
The findings in frequencies across the selected HEIs revealed that in the first Semester of the Academic year 2023/24, there were 3,375 instruction sessions from the selected HEIs distributed into Pwani (1,398), Lake (865), Central (925), and Southern Highlands (187) as shown in Figure 1 to 4.

Figure 1. CBA Methods Deployed at Lake Zone

Furthermore, despite the training efforts, the lecture method was still in high percentages and frequently in utilization among zones, whereas in Lake (67.6%), Pwani (63.6%), Central (56.1%), and Southern Highlands (42.1%).

Figure 2. CBA Methods Deployed at Pwani Zone

Likewise, it was found that individual learners' class activities were provided by instructors to complement the lecturing method at different magnitudes, being at Central (54%), in Southern



Highlands (50.8%) in Pwani (43.1%), and in Lake zones (42.8%).

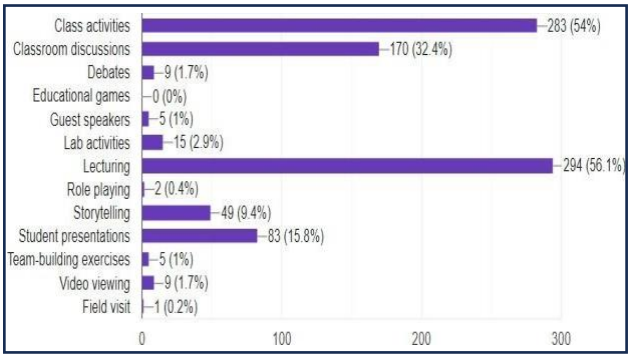


Figure 3. CBA Methods Deployed at Central Zone

Nevertheless, the storytelling method was utilized in the minimal range (3.6% to 19%). Findings exposed the presence of very low marginal utilization of other CBA methods, including debates (1.7%-2.8%).

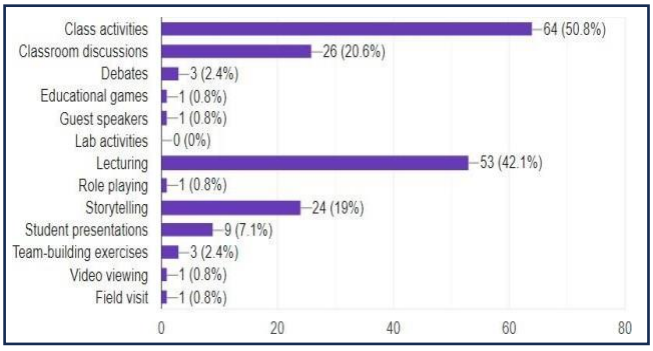


Figure 4. CBAMethods Deployed at Southern Highlands Zone

Team building exercises was found to be (0.6%-1.7%); lab activities (0%-2.9%); Guest speakers (0%-1%); video viewing (0.2%-1.7%); role-playing (0.2%-0.8%); field visits (0%-0.8%); and educational games (0%-0.8%).

Findings on the CBA deployed by module instructors in the classrooms after training disclosed the gaps in capturing continued stagnated to the lecturing methods reflecting the transitional nervous in adaptability of field, video viewing, team-building exercises, students' presentation, storytelling, role-

playing, labaratory activities, engagement of guest speakers, education games, debates, classroom discussion, and activities. The low level of CBA methods utilization by module instructors in classrooms for module content delivery indicated less time allocated for the preparation of activities for the learners' engagement (Wei & Lii, 2022; Ghoniem & Ghoniem, 2022). According to Malhotra et al. (2023), the power of CBA is grounded in the shifting of instructors' roles toward guiding learners for learning rather than dominating the process.

The paper in hand advocates for the need for module instructors at HEIs to devote time to the preparation of activities that lead to multiple impacts, fostering learners' engagement in designing, preparation, implementation, and assessment, hence taking part in the ownership of pedagogical processes. Similarly, Rajaram (2023) and Wabwire (2023) apprehended the CBA instruction approaches for being custody of methods that fit different learners' needs, hence creating interest and enthusiasm toward the acquisition of teaching and learning objectives.

Nonetheless, the suggestion is made to the module instructors to be dynamic towards changes, accept the CBA as contributing towards raising confidence, capacitate in understanding the student's learning needs and styles, thereby tailoring engaging and catalyzed instructional methods for easier understanding and meeting objectives. Additionally, the findings alarmed instructors' stagnation in self-determination for suppressing the lecturing methods as Resch et al. (2023) focused on module instructors' psychological preparedness to raise positive stimulus for creation, readiness to learn new ways of teaching, assimilate, practice, and accommodate CBA methods.

Undoubtedly, the stagnation in undertaking the CBA implied the rejection and recklessness depicted in the background and practices, jargon that needs interventions. An additional note was made by Garnham and Gowers (2023) that the utilization of active and intensive CBA methods is limited to other factors, including class size, unsupported teaching and learning materials, nature of the delivered content, and the lesson's allocated time. Certainly, Mulwa et al. (2023) and Wabwire (2023) insisted on mindset changes as the major tool for skeptics' unwanted teaching and learning behaviors in all classroom elements. Besides, the CBA approaches are remarked in scaling up curriculum viability and persisting mismatches found in the labor market against graduate competencies (Mloka et al., 2023; Wabwire, 2023). Low levels of learner engagement in classroom teaching and learning activities hinder self-regulated learning toward the acquisition of the focus, skills, flexibilities, and competencies assessment (deep learning).

Instructor's Nervousness in Digital Resources

Based on the findings, the digital instructional resources utilization across the HEIs zones in the first Semester of the Academic year 2023/24 was 3,037 less by 338 to the CBA instruction sessions. Similarly, the distribution of the findings zone-wise from the selected HEIs was Pwani (1,679), Lake (700), Central (128), and Southern Highlands (530) as shown in Figures 5 to 8.

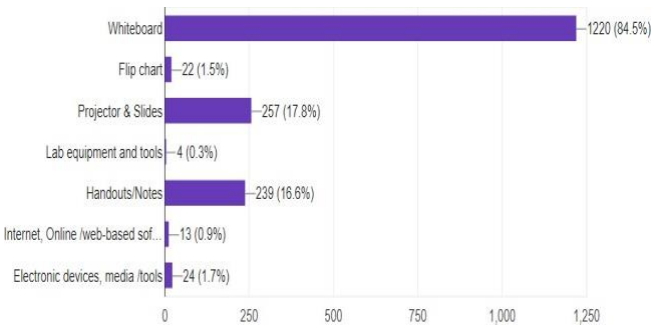


Figure 5. Instructional Resources Commonly Used by Instructors in the Pwani Zone

The use of the whiteboard. sometimes called chalkboard among instructors, was at the peak comparatively to other media of classroom modules content delivering being Pwani (84.5%), Central (65.4%), Lake (83.7%), and Southern Highland (85.3%).

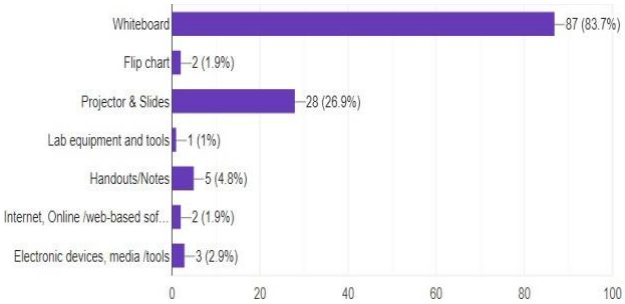


Figure 6. Instructional Resources Commonly Used by Instructors in Central Zone

Controversially, there were low marginal levels of other media utilization for content delivery across zones. The findings on the utilization of projectors and slides in supporting content delivered in the classroom were Pwani (17.8%), Central (51.9%), Lake (26.9%), and Southern Highlands (20.3%). Similarly, other content-delivering modes were found to be utilizing flip chart ranges 1.5% to 3.4%; Lab equipment and tools were between 0.3% to 3.8%; handout note provision to students was 16.6% to 4.8% across the zones.

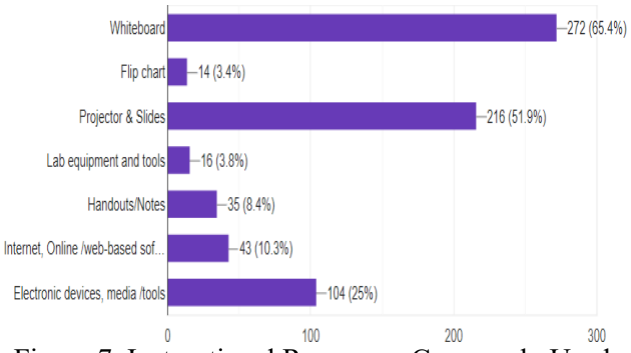


Figure 7. Instructional Resources Commonly Used by Instructors in the Lake Zone

Likewise, the direct utilization of digital technologies in the classroom settings was assessed, whereby the findings disclosed the very minimal levels of electronic devices, media, and tools usage, whereas the Lake zone was leading by 25%; the Central zone (2.9%); Pwani zone (1.7%) and Southern highlands (0.2%). Similarly, the usability of the internet, online, and web-based software across the zones ranged from 0.2% to 10.3%.

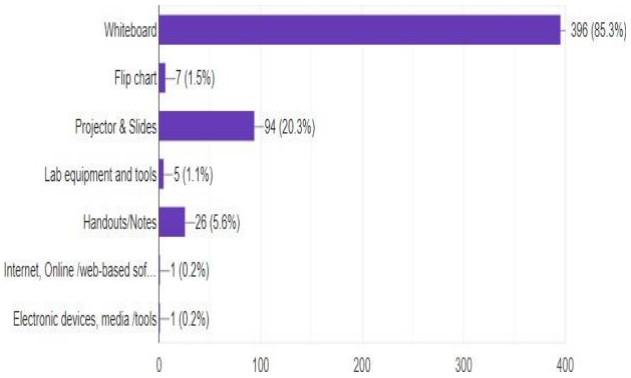


Figure 8. Instructional Resources Commonly Used by Instructors in the Southern Highland Zone

Based on the findings, teaching and learning practices across the HEI zones were observed to be limited in digitalization exposition and mostly continued to rely on whiteboards and chalkboards. However, the contextual observations proved that today's learners are apprehended for being digital invaders and quicker in familiarization and deployment of different platforms, apps, and forums for learning intelligence, innovation, and transformative learning strategies (Ingaldi, 2023; Tan, 2023). Nevertheless, it was noted in the findings that instructors are nervous to front-line the utilization of flip charts, laboratory equipment and tools, handouts and notes, internet, online and web-based software, electronic devices, media, and tools. However, Mefferd & Bernacki (2023) insisted on today's learners' expositions toward digital-cognitive approaches, strategies, and methods as being keen for future performance realization. Subsequently, the learning and teaching became spaceless on the module contents delivered through offline and online media, equated to the use of video, audio, and reading to foster communication, collaboration, and innovation (Agarwal et al., 2023; Kennedy, 2023).

The practicability in HEIs needs to embed the adoption and adaptation of digital-techno devices blended with CBA pedagogies in the utilization of digital forms, referencing sources, and assessment tools for individual and group learners' ownership, flexibility, sustainability, and motivation to engage in the learning process. Based on that stance, de Obesso et al. (2023) and Kassymova et al. (2023) cemented the need for the instructor's digitalization deployment to impact the quality of the learner's learning process. The experience, background, and traditional approaches situated in lecturers' schemas influenced readiness in acceptance or rejection to accommodate CBA approaches in classroom-related practices (Wei & Lii, 2022; Ghoniem & Ghoniem, 2022). Consequently, the findings disclosed that instructors were experiencing bottlenecks and barriers in utilizing digital instructional resources for supporting CBA pedagogical practices. Scholars warned that instructors who are not confident in integrating digital technologies with pedagogical practices are in the position of feeling daunted, overwhelmed, and incompetent (Resch, 2023; Inganah, 2023; Hameed & Hashim, 2022).

Another suggestion is the collaboration among instructors with educational technologists in the integration of digital instructional resources, in the frontline of the perfection of multi-instructional tools deployments through feedback provision. Further, de Obesso et al. (2023) and Kassymova et al. (2023) insisted on the feedback being crucial for informing discrepancies in the utilization of multi-digital instructional resources for the betterment of digital competence acquisition during classroom teaching and learning. Furthermore, suggestions are made on the need for instructors and classrooms to be equipped with digital instructional resources, including devices, tools, and equipment; instructors continue to be exposed to the updated digital-technology-related training and workshops to develop a sense of honesty, integrity, comfort, and confidence. Moreover, the efforts toward technologies and digital invasion are vested in the instructors' readiness, self-determination, and self-regulation in digital instructional resource utilization for 4IR transformations (Romanyuk et al., 2022; Lim, 2023; Kennedy, 2023).

Afterward, efforts need to be made by HEIs to overcome instructors' nervousness in digital resource utilization during teaching and learning practices. Motivation and encouragement are essential to offset the existing behavior, as most instructors' schemas in HEIs have experience and

background on the traditional approaches that influence readiness in acceptance or rejection to accommodate digitalized-CBA approaches in classroom-related practices (Wei & Lii, 2022; Ghoniem & Ghoniem, 2022). Also, scholars insisted that training to capacitate instructors with CBA pedagogical-digital technologies and periodic friendly manner follow-up suspends nervousness and phobia in the adaptability of new ways of classroom practices (Kennedy, 2023; Agarwal et al., 2023). Another suggestion made for the instructors is built on dedicating time for exposition into different educational digital tools and platforms, attending training sessions and workshops, and revoking the classroom digital devastation by incorporating one or two digital resources into the lessons at a time.

CONCLUSION

The study conclusion is made in two-fold to the HEIs to ensure that: despite the instructors being ultimately facing difficulties in the deployment of CBA multi-instructional methods and digital resources, efforts need to be devoted to motivating them to engage in self-determination, and self-regulation with time and patience to develop the competences and confidences classroom practices that reflect the 4IR com-petences. Also, the module instructors are supposed to continue with capacitation so that they acquire new professionalism competencies that will enable students to engage in digital supports, an inclusive learning culture, and transformative pedagogical methods towards the achievement of learning objectives alongside the learning needs. Further, to module instructors, the readiness to embrace digital utilization and flexibilities in the adoption of realistic pedagogies that foster classroom activity, henceforth capacitating students to become independent learners in learning processes.

The recommendations are made to the HEIs in taking actions towards overcoming instructors' nervousness against CBAs and digital resources utilization, provision of training for technicalities, materials, and supportive guidance is crucial. Inwardly, the instructors are obliged to develop self-determination and self-regulation readiness in adoption and keep on deploying CBA instruction methods and approaches for the betterment of the learners and HEIs institutional goals. Moreover, the proposed HEIs' future research is in the areas of: (1) Seamless blended digital learning for flexi-ble, agile, and responsive learning modalities; (2) Exposition of Higher learning institution lecturers in instructional resources to enhance students' acquisition of 4IR requirements; (3) Competence-based instructional assessment for students' performance: A case of Higher Learning Institutions.

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