

SLAIHEE NEWSLETTER

-2023-

EDITORIAL

Mental health and well-being are essential issues that are often overlooked in the fast-paced world of higher education. With the growing concern for student mental health, it is essential that institutions take this issue seriously and provide students with the support that they need.

The stress of academic competition, the financial burden of education, employment uncertainty due to lack of relevant skill building in higher education, and the isolation brought on by the COVID-19 pandemic have all contributed to a rise in mental health concerns among students. Furthermore, many students struggle with mental health issues, such as anxiety and depression, which are exacerbated by the demands of higher education.

To address this issue, institutions need to provide students with mental health resources and support. This could include counseling services, support groups, and online resources for mental health and well-being. Additionally, institutions can aid in creating a culture of openness and support, where students feel comfortable discussing their mental health concerns and seeking help.

Furthermore, institutions can play a critical role in addressing the stigma surrounding mental health. By promoting awareness and education, institutions can help reduce the stigma and encourage students to seek help when they need it.

It is also crucial that institutions provide students with opportunities to prioritize their mental health and well-being. This could include offering stress management workshops, mindfulness and meditation classes, and physical activity programs. By providing these resources, institutions can help students manage their stress and sustain their mental health and well-being.

In conclusion, mental health and well-being are essential for the success of students in higher education. Institutions must provide students with the resources and support that they need to address their mental health concerns and prioritize their well-being. By taking a proactive approach to mental health, institutions can help students achieve their full potential and succeed in their academic and personal lives.

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USE OF PRIMING AS A TEACHING AND LEARNING STRATEGY

The exposure to a stimulus can lead to its identification and classification later on (i.e. information processing) and this phenomenon is referred to as priming. For example, the presentation of a priming word can increase recognition, classification, or generation of words linked to the prime (Wexler et al, 2016). The 'prime' itself can also be a face or an object and subsequent responses to this stimulus or similar stimuli can increase the speed of the response, increase the accuracy, or even bias the nature of the answer provided (Wagner and Outsail, 2002).

Traditionally priming has been widely used in language learning and research as shown in the above example. It is regarded to be an implicit process which occurs with less awareness and conscious effort, leading to a form of implicit learning (Trofimovich and McDonough, 2011). In the classroom, priming can be an effective strategy for learning as it orients the students to the tasks, which may increase learning speed while encouraging learner motivation. Methods by which priming can be used in teaching and learning include introducing new material before starting a lesson and this can be done on that day or even a few days earlier. The material used can take diverse forms including words, topics, videos, literature, laboratory equipment etc.

Studies have shown that priming is incremental and can be regulated by repetition. Therefore, with multiple repetitions, the extent of priming increases and this advantage is seen over week-long periods (Wiggs and Martin, 1998). In the classroom it can be an effective strategy as priming tends to reduce anxiety for students, can be done in relatively less time and preparation, help students transition from one activity to another and often results in higher achievement in learning (Anon,2016).

While the use of priming is well established in linguistics teaching and research, its inherent advantages as provided above make it an attractive teaching and learning method to be adopted and widely used.

References

- Anon (2016). Priming as a teaching strategy: definition & examples. Retrieved from <https://study.com/academy/lesson/priming-as-a-teaching-strategy-definition-examples.html> on 25.04.2022
- Trofimovich, P. & McDonough, K. (2004). Using priming methods to study L2 learning and teaching. Trofimovich, P. & McDonough, K. (eds). Applying priming methods to L2 learning, teaching, and research: insights from psycholinguistics. Amsterdam: Benjamins, 4 Applying Priming Methods to L2 Learning, Teaching and Research: Insights ... - Google Books
- Wagner, A. D., Outsail, W. (2002). Priming. Ramachandran, V.S. (ed), Encyclopaedia of the human brain, Academic Press, 27-46
- Wexler, B. E., Iseli, M., Leon, S., Zaggie, W., Rush, C., Goodman, A., Esat Imal, A., & Bo, E. (2016). Cognitive priming and cognitive training: immediate and far transfer to academic skills in children. Scientific reports, 6, 32859. Cognitive Priming and Cognitive Training: Immediate and Far Transfer to Academic Skills in Children | Scientific Reports (nature.com)
- Wiggs, C.L. & Martin, A. (1998). Properties and mechanisms of perceptual priming. Current Opinion in Neurobiology 8(2),227 Properties and mechanisms of perceptual priming - ScienceDirect

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BRAINSTORMING BECOMES INSTRUMENTAL IN LIFELONG LEARNING

Brainstorming is being reconsidered and investigated as a teaching strategy to better foster creativity in the educational setting (Doğan & Batdı, 2021). According to Khan & Ashraf (2021), innovative and productive thinking takes place in students when they are directed towards activities such as brainstorming, opposed to their learning taking place in a more restricted and routine classroom setting. Therefore, this dynamic approach facilitates learners to formulate novel solutions for the problems starting from what they know already (Khan & Ashraf, 2021). Different strengths and capacities of imagination in individuals would produce a diverse collection of multiple solutions for a given problem leading to productive discussion in the classroom context (Doğan & Batdı, 2021).

It would be further productive to combine a variety of techniques towards improving thinking skills in students rather than using conventional brainstorming as the only technique. Brainstorming could be coupled with modern teaching and learning approaches such as flipped classrooms, game-based classrooms etc to create diverse opportunities (Doğan & Batdı, 2021). Brainstorming takes place within groups may lead to far more creative solutions when compared to the same takes place individually. The significance of the group brainstorming and the techniques for making it more effective have been detailed out by Brown & Paulus (2002).

Brainstorming ensures that an affluent interaction takes place between the teacher and the students. Also, as it highlights the importance of students' experience and training, students are given responsibilities developing them into more independent learners (Khan & Ashraf, 2021). However, there has been an intensified requirement of further research to establish efficient brainstorming in diversified educational contexts (Doğan & Batdı, 2021).

Lifelong learning is a self-driven and ongoing process where benefits extend beyond the original context of its application. It assures both personal and professional advancement throughout one's life. It would be obligatory that one analyzes situational changes, identifies problems and effective solutions with a sense of creativity to thrive in daily challenges. Within the educational context, different teaching strategies have been experimented to stimulate creativity in students. However, this remains an area to explore since the student performance in this regard has always met only a limited success.

References

- Brown, V. R., & Paulus, P. B. (2002). Making Group Brainstorming More Effective: Recommendations from an Associative Memory Perspective. Current Directions in Psychological Science, 11(6), 208-212. <http://www.jstor.org/stable/20182814>
- Doğan, Y., & Batdı, V. (2021). Revisiting brainstorming within an educational context: A meta-thematic analysis. Journal of Learning for Development, 8(3): 541-556.
- Khan, A. N., & Ashraf, S. (2021). Brainstorming as a promising tool for teaching languages. Journal of Emerging Technologies and Innovative Research, 8(8): 420-423.

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SKILLS DEVELOPMENT IN HIGHER EDUCATION IN SRI LANKA

The importance of skills development in education is to reduce unemployment, raise incomes and improve standards of living. One-third of the working population in low- and middle-income countries lack the basic skills required to get quality jobs, leaving them unable to achieve their full productive potential and limiting economic investment and growth (World Bank Group, 2021).

Education and training generate other significant benefits too – reduced dependence on income support for unemployed individuals, reduced incidence of crime, improved lawful behaviour and health awareness among them.

In this setting academics, have an obligation to students, as well as to our nation, to focus on developing their skills to enable them to lead productive lives and contribute to the economic growth of the country.

Apart from the 'Mechanical or Hard skills', which are job- and discipline-specific, the skills we need in higher education (HE) which are important for work and life performance are many. Of these, soft skills are pivotal to employability and career success and are important for a complete human being to achieve happiness in life. Soft skills are social, personal, and methodological (Qizi, 2020).

In non-professional courses, reliance on the KOLB's experiential learning cycle to develop more innovative teaching and learning techniques, and for the learner to repeatedly practice the experiential element with industrial training, work experience, and elective programmes is ideal (McLeod, 2017). Teacher training courses also add value, to equip them with the necessary skills for undertaking the complex task of imparting knowledge, skills, and values to the young.

Professional or hands-on education streams, like medicine, architecture, and business management are more amenable to skills development, or rather the 'monitoring' of the skill that is targeted. In these fields of education, it is really 'performance' education training that we use while students are with us (O'Mahony, 2018). Medical education on the other hand should strive to produce graduates with compassion who 'puts the patient first'.

The staff development (SD) centre at the University of Colombo became a reality in 1997 with Prof. Suki Ekaratne as its first Director. The CTHE courses commenced and were followed by the ASTHE course. SD in the HE system commenced in early 2000. However, we seem to have lost the very essence of what SD was meant to do for teaching in HE since some of these courses lacked skills training and were delivered lecture-style which negated what SD is supposed to inculcate; the passion and the desire to be a good teacher that is possible only when teaching skills are developed.

Teaching in HE became more meaningful together with the Scholarship of Teaching & Learning (SOTL) with the birth of SLAIHEE in 2004 and SLAIHEE conferences providing young academics to put into practice what they have experienced through research in HE.

Teaching students who have come from different backgrounds made me identify and analyse the relevance of societal values in higher education. The experience was enriching because I encountered students who were receptive, and would question, and challenge their teachers. As expected, these students who graduated with flying colours and those in the healthcare system are performing equally well.

Quality of life can be enhanced because society functions better with individuals who have better cognitive skills. The values of students occupy a central position in the cognitive system and on students' personality because it includes components of knowledge, affective and behavioural, determining their attitudes and motivations (de Agrela Gonçalves Jardim, da Silva Junior and Alves, 2017).

If a system change is warranted to produce employable graduates in the non-professional courses, the process of training for this change itself should be skilled, i.e., brought about in a manner that is acceptable to the relevant academics. The solutions should come from them rather than being forced upon them through various means by the so-called 'outsiders'.

We have known since time immemorial that there are no shortcuts to nurturing intrapersonal, social, analytical skills, and critical thinking, It can only be developed through proper exposure, evaluation of competitive ideas, and feedback from the teachers and fellow students. The guidance that a student receives from their teacher and peer groups in higher education is invaluable.

Therefore, the most suitable solution is to include additional skill acquisition programs, certificate programs and industry-oriented training in the course curriculum of the HE system. This helps in creating a blended approach in the education system.

References

- Bridgstock, R. (2009). The Graduate Attributes We've Overlooked: Enhancing Graduate Employability Through Career Management Skills. *Higher Education Research & Development*, 28(4), doi: 10.1080/07294360802444347.
- Gupta, M. (2018). *International Journal of Management and Humanities*, 3(4), June.
- J. R. College of Physicians Edinb. (2017). 47: 281-287. doi: 10.4997/JRCPE.2017.315. The paper.
- McLeod, S. (2013, updated 2017). Kolb's Learning Styles and Experiential Learning Cycle. Retrieved from Simply Psychology website: <https://www.simplypsychology.org/kolb.html>
- Qizi, K. N. (2020). Soft Skills Development in Higher Education. *Universal Journal of Educational Research*, 8(5), 1916-1925. doi: 10.13189/ujer.2020.080528
- World Bank. (2021). Importance of Skill Development [Report]. Retrieved from the World Bank website.
- (2017). Values in Students of Higher Education. *Creative Education*, 8(10), August.

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ROLE OF CONSTRUCTIVISM IN INSTRUCTIONAL DESIGN & DELIVERY

Constructivism is a key learning theory that would make the teaching-learning process in higher education more effective. According to Biggs (1996), constructivism is made up of a family of theories and all of them have a common focus on learners' activities in creating meaning. It is further emphasized that the concept and related ideas have important implications for teaching and assessment. Steffe and Gale (1995) mentioned that the essence of constructivism is that the learners construct their own knowledge and meaning actively through their experiences.

Within an educational setting, different forms of constructivism such as cognitive constructivism, social constructivism, radical constructivism, constructivist epistemologies, and educational constructivism (Steffe & Gale, 1995; Jones & Brader-Araje, 2002) are applicable. Jones and Brader-Araje (2002), state that social constructivism and educational constructivism (including theories of learning and pedagogy) have imposed the largest impact on instruction and curriculum design.

Constructivism can be used as a framework that provides guidance and direction in decision-making at the following stages of instructional design (Biggs, 1996):

- Deriving course objectives by setting levels of performance at a suitably high cognitive level
- Planning teaching-learning activities in order to produce the stipulated levels of performance
- Assessing and reporting the performance of learners.

Constructivism also provides course designers with instructional approaches that are in line with current research on learning (Jones & Brader-Araje, 2002). Teachers will be able to design instruction with constructivism that would lead to deep learning in students (Jones & Brader-Araje, 2002) by:

- viewing learning as an active process
- taking learners' prior knowledge into consideration
- building on preconceptions, and
- eliciting cognitive conflict

A constructivist approach to instructional design makes the learners feel empowered and motivated. This could also be applied in both face to face and online learning where motivating learners is a critical requirement especially in the virtual classroom on a regular basis. This promotes student autonomy where they will bring their own knowledge and experience into the classroom setting.

A major aspect of constructivism is that the role of the teacher becomes a 'facilitator' of instruction rather than an 'administrator' as practiced in the conventional setting. This creates an environment in which students can learn through their own initiative and insight. Furthermore, it allows students to get away from tradi-

-onal rote learning with memorization of information and to get involved actively in the teaching-learning process, leading to the acquisition of Higher-Order Thinking Skills (HOTS) through deep learning. According to Killion (2002), HOTS can also be established with different instructional approaches such as dialogues, debates and discussions in online learning. It is also observed that constructivism creates a positive learning environment that would not only enrich technical skills, but enhance soft skills such as communication skills and collaborative learning (Nyikos & Hashimoto, 1997). This enables students to gain social and employability skills, support each other's learning and value the opinions of their peers. Hence, it is evident that higher education effectiveness can be improved substantially by adopting constructivism in instructional design and delivery.

References

- Biggs, J. (1996). Enhancing teaching through constructive alignment, *Higher Education* 32(3), pp. 347–364.
- Jones, M. G. & Brader-Araje, L., (2002). The impact of constructivism on education: Language, discourse, and meaning, *American Communication Journal* 5(3), pp. 1–10.
- Killion, J. P. (2002). Loading the E-learning shopping cart, *Journal of Staff Development* 23(1), pp. 12–16.
- Nyikos, M. & Hashimoto, R. (1997). Constructivist theory applied to collaborative learning in teacher education: In search of ZPD. *The Modern Language Journal*, 81(4), pp. 506 – 517.
- Steffe, L. P. & Gale, J. (eds.) (1995) *Constructivism in education*. Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.

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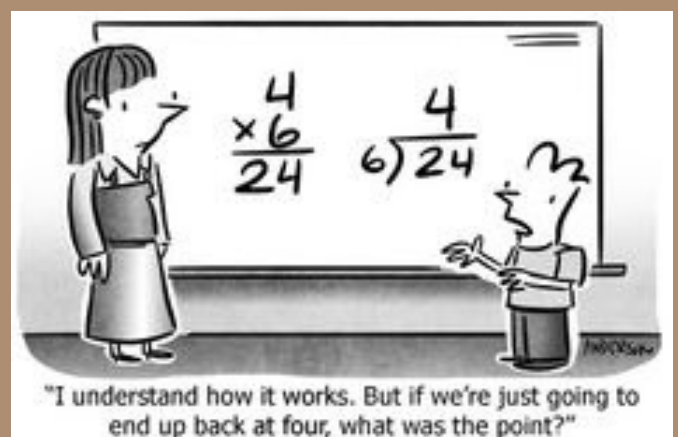
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Teaching Development Workshops by SLAIHEE, 2023

SLAIHEE has been discussing how best teaching staff can be helped with teaching concerns and problems they have been facing, especially with the resumption of Face-to-Face teaching following the enforced online teaching. The conduct of half-day workshops (WS's) was identified as a possible staff development activity to assist staff. Accordingly, a workshop on Constructive Alignment was first conducted jointly by Prof Kumari Fernando and Dr Priyantha Bandara recently. Thereafter, four inter-linked face-to-face half-day workshops were planned, of which three have already been conducted in January and early February 2023, as;

1. To produce "improved" students, what teaching approach changes have you to re-design?
2. Choosing Teaching Activities that can produce improved students
3. Designing assessments to improve skills, methods & procedures that students will continue to use

The last workshop in this series will be conducted in late March under the title "Using your inquiry-led teaching improvements to draft a publishable Abstract"

WS's #2 and #3 were more of an applied nature relating to changing classroom practices while WS # 1 was also of an applied nature, but towards an outcome of conceptual change, as outlined below.

The first of the four above-titled workshops was aimed at developing a self-examined view of what problems staff faced with regard to enabling improvements they desired in their students and to examine 'approaches' that would address such problems. Therefore, prior to the first workshop, a short online survey was conducted among the workshop registrants. It revealed that staff experienced a set of 'problems' ranging from a lack of student attentiveness and engagement to the lack of student skills that would allow students to "perform" tasks that had a closer relationship to their subjects and which involved Higher Order Thinking Skills (HOTS). It was the inability of students to perform such HOT Skills that comprised the major problems that staff faced while almost all staff had tried remediating this through their teaching, but it had not worked out. The skills that were identified as lacking in students ranged from independent responsiveness, accountability, engaging in discussions, engagement, active participation in group work, self-learning, constructing new items such as by applying the subject fundamentals that had already been taught, independent learning, self-directed learning, task management etc. Thus, these ranged from being related to quite specific methodologies to skills that were transferable to more generalised situations once students were able to master these. In this same survey, participants ascribed the causative factors (for these problems) to a range of factors 'external' to their control such as student-related

factors, classroom or institutional conditions, student reluctance to change their practices, large class size, time limitation for subject coverage, lack of practical resources, lack of institutional support, lack of student motivation. etc.

As that 'externalised causes' view was self-defeating, in order to develop 'approaches' that teachers could themselves use to address the causative factors of such problems they faced, the workshop used a method to have participants engage in several WS activities for self-examining their current teaching approaches and practices. Here, to become effective self-agents of change, participating staff first needed to change the 'viewpoint' to one where they themselves could develop to be in charge of many causative factors that were currently adduced as being 'external' to them. This, however, would only become possible if participating staff were able to learn in these WS's (and to become confident) that there existed methods to address the causative factors to bring them under their own control. While WS # 2 would (next) give them the methodology to be adopted in their classrooms for changing teaching methods to improve their students along what they now thought as 'problems', it was WS #1 that would open their minds to begin adopting any new teaching practices based on a fresh 'approach'.

In the first WS itself, therefore, participating staff experienced how, in a furniture-movable setting, such furniture could be moved without much difficulty from the norm of a traditional 'transmission-only' related classroom (that stymied student interaction) to an interactive-group setting. Also, the WS did not center on a traditional PPT type transmission mode of delivery but was based on methodically numbered and labelled handout (HO) sets and a Session Plan. The accompanying Session Plan specified the teacher activities and learner activities, together with their provisional timing, and was used as a 'planning' resource for participants to 'see' and 'experience' interactive planning for moving on to Oscillatory teaching. The Session Plan also set down how Teaching – Learning 'Activities' (TLA's) used the HO's in the HO set that was sent to participants in advance as well as distributed as printed copies at the WS sessions. The rationale of this adopted methodology was to demonstrate 'Teaching' that encouraged interactive 'Learning' in the participants, and through a Resource Based Learning (RBL) approach. Thus, participants witnessed 'Oscillatory Teaching' that was modelled into a Session or Lesson Plan and experienced the enhanced 'learning' and belongingness that ensued via this teaching method. This 'ground-truthing' of the planned 'step wise procedure' of 'Oscillatory Teaching', along with discussions, attempted to showcase such concepts

that would help staff to develop a 'performance' based teaching approach to develop skill capability in their students, for them to engage in specified tasks that were related to the taught subject material. Here, feedback showed that participants were able to gradually change their "Approach" to develop skill-related development and its 'performance' through the use of 'Deliberate Spaced Practice' by experiencing a teaching method they could themselves use, i.e., 'Tell-Show-Do' (a task) with Supervision-Do a task collaboratively with Peers and then, perform the practised task on their own'.

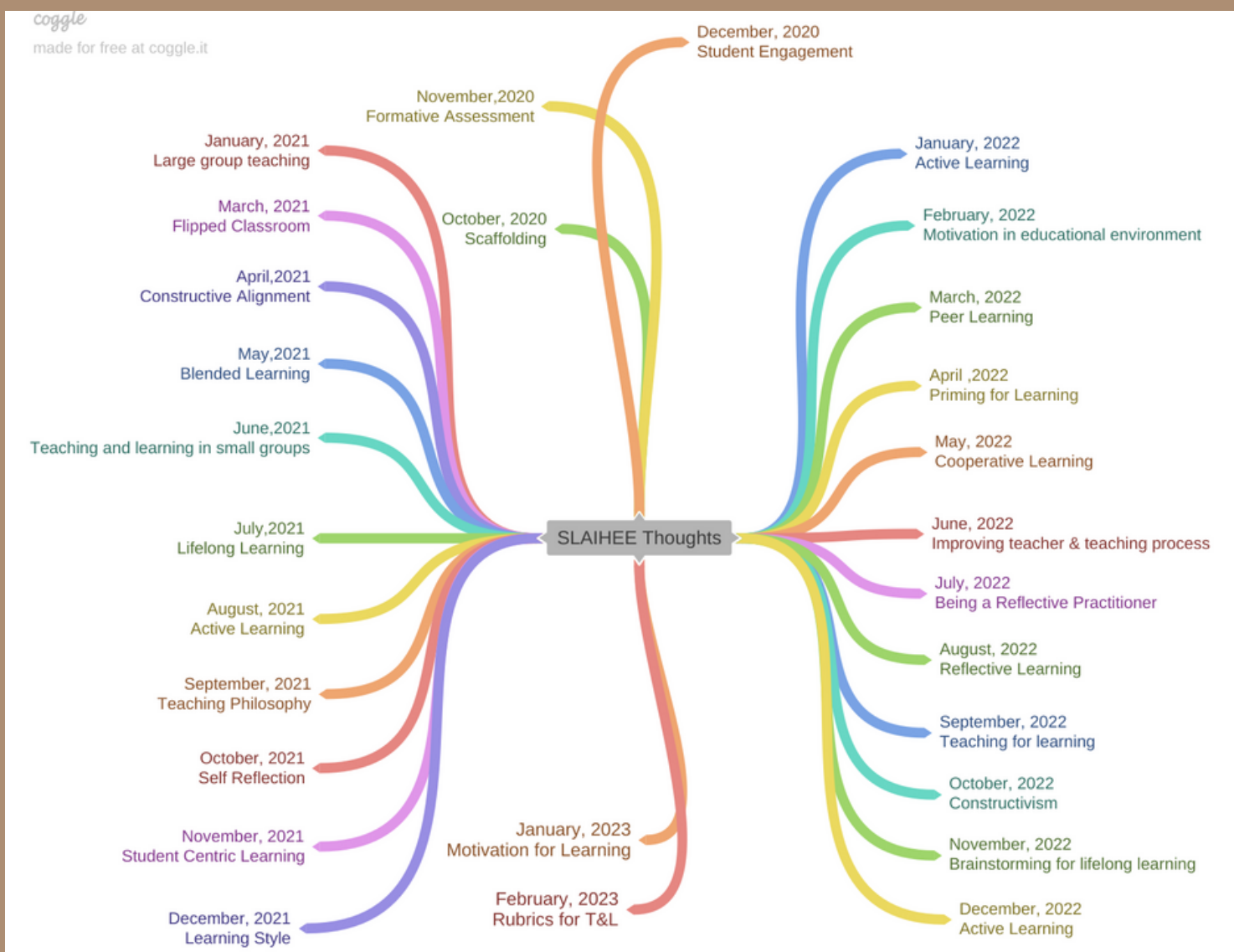
Various other teaching concepts and methods were discussed and used, while staff feedback indicated that they had begun to realise that a change in approach was necessary and was also possible by the use of the teaching principles that were in their HO's and then discussed and showcased.

The second WS was on "Choosing Teaching Activities that can produce improved students". Using similar WS methodology as outlined above for WS 1, this WS what Teaching Activities could be used to improve

students to enable learning concepts and skill habits that would improve their students. How a mix of subject Outcomes as well as skills Outcomes could be incorporated into their subject teaching was tried by participants using a Worksheet. This WS also discussed how both Lower Oder Thinking Skills (LOTS), as well as HOTS, could be improved progressively in students using step-based teaching procedures and linked to Constructive alignment with Backwards Design.

The third WS was on "Designing assessment to improve skills, method & procedures that students will continue to use". This WS involved the use of 'authentic / performance' assessment as a tool to get students to develop the performance of skills/tasks that were desired. In order to do so, several further tools were discussed such as Rubrics for Criterion-Referenced Assessment, the design of assessment that would challenge their students, step-wise progressive tasks that would involve formative as well as summative assessment, the design of questions as Selected Responses and Constructed Responses together with their linkages to student performance.

SLAIHEE THOUGHT FOR THE WEEK MIND MAP



Future Events

Workshops

"Using your inquiry-led teaching improvements to draft a publishable Abstract"

17th March 2023

SLAIHEE Conference

Abstract Submission

27th March 2023

Submission of Full Paper

29th May 2023

Submission of Camera Ready Copy

26th June 2023

Conference

28th July 2023



SLAIHEE

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- Associate Member accredited with having Continuing Professional Development (referred to as CPD Associate Member)

Please refer [SLAIHEE website](http://www.slaihee.org/) for more details on memberships.

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