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### Use of Asynchronous Discussion Forum (ADF) and CompendiumLD (CLD) as a Learning Strategy in a Distance Learning Online Course- A Reflective Narrative

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## Use of Asynchronous Discussion Forum (ADF) and CompendiumLD (CLD) as a Learning Strategy in a Distance Learning Online Course- A Reflective Narrative

Munir Moosa Sadruddin \*

**Abstract:** The paper reflects on my personal learning experiences as a postgraduate online distance learner on the use of two contemporary ICT tools, i.e., Asynchronous Discussion Forum (ADF) and CompendiumLD (CLD). The paper opens with an overview on the use of ADF and CLD. I then reflected on my personal learning experiences on the subject matter through personal narrative method. Finally, I have suggested, how tutors can utilize these technologies to maximize learners' participation in online learning environment. ADF has nurtured critical thinking, questioning, writing and problem-solving skills. It has further optimized my online participation. Whereas, CLD has equipped me with the skills to design creative learning interventions. Both the digital tools have increased my collaboration with peers and resources. Not only did I gain skills, but also shared learning with others. Integration of these tools has potentials to augment formal and non-formal learning experiences in online environment.

**Keywords:** CompendiumLD, Asynchronous discussion forum, ICT tools, online learning, distance learning, reflection.

## Introduction

Digital technologies have brought global transformation to the field of education. It has catalyzed teaching and learning process. It empowers teachers to use wide range of resources as effective instructional strategies. Whereas, it connects learners beyond the classroom for deep learning practices. [Lebenicnik, Pitt, and Istenic-Starcic \(2015\)](#) highlight, "The variety of online learning resources facilitates informed use and enables students to create the learning environment that is most appropriate for their personal learning needs and preferences". With on-going transitions, online learning has become the standard mode of delivery for distance learning programs. In this regard, the use of online learning tools is of utmost importance to increase learners' motivation and to accelerate their participation.

Online discussion forum is a web-based tool, which is widely used to exchange dialogues and network with people. It is categorized as synchronous and asynchronous. Synchronous forum occurs in real time, whereas ADF is not constrained by time or date. Individuals can post a comment on others statement at their suitability and flexibility.

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Likewise, brainstorming tools are used to organize ideas visually, and to develop innovative solutions to the problems either independently or collectively.

ADF is an active learning strategy to engage learners into deep learning practices in online environment (Blackmon, 2012; Eccarius, 2011). It is widely used as a point of interaction among the learners, instructors, and resources in formal, informal and non-formal learning settings. Whereas, CLD is a web-based mind-mapping tool, designed by the Open University Learning Design Initiative to create innovative learning designs. It is commonly used to brainstorm ideas, and to produce sequential action plans. Both the tools potentially promote information acquisition and foster collaboration among online learning communities (Wegner & Nückles, 2015).

Masters of Online and Distance Education (MAODE) is a distance learning online degree course, offered by the Open University, UK. During the first module, H800 (60 credit hours), Technology-enhanced learning: practices and debates (cohort of 2019), learners were introduced to various innovative ICT tools such as ADF and CLD. Previous research studies have discussed learners' perceptions about asynchronous discussion forum (Badawy, 2012; Christensen, Poehl, & McFerrin, 2018), however researches about in-depth personal experiences of online distance postgraduate learners regarding the use of ADF and CLD is sparse.

This research study seek to address the subject matter. It delves into the in-depth experiences of using these online learning tools by a distance learner, registered for an online postgraduate degree course at the Open University, UK.

I chose two tools, i.e., Asynchronous Discussion Forum and Compendium LD for reflections. I have first summarized the use of these tools through literature. I then used personal narrative research method to express how these tools have supported my learning throughout the module. Finally, I have highlighted how practitioners can use these tools effectively as online learning intervention.

## **An Overview on the Use of ADF**

ADF is a collaborative platform, used by learners and tutors to advance discussions. Craig (2005) expressed, "It plays a critical role in the development of shared meaning and collaborative knowledge acquisition in online learning environments".

ADF nurtures critical thinking, questioning, and problem-solving skills (Hew & Cheung, 2012; Vess, 2005; Yamagata-Lynch, 2014). Thomas highlights, "[ADF] can facilitate the development of in-depth critical thinking because it provides the platform for students to think and organize their ideas before responding to questions or comments in the discussion forum".

ADF also "promotes active thinking and interaction with others, allow more intimidated and shy students to participate" (Abawajy & Kim, 2011). It further promotes the culture of knowledge sharing that "possibly create a deep learning that transforms their present knowledge into new knowledge" (Smith, 2015).

Introducing ADF as a blended learning strategy optimizes traditional learning experiences, promotes better retention and contributes towards constructive participation



(Annamalai, Manivel, & Palanisamy, 2015). Seethamraju (2014) compared the use of discussion forum in blended learning environment with learners' performance in the assessment task. 17% participants who contributed in online forums received distinctions, whereas 37% received credit, and 46% acquired average and below average grade in the assessment task. Comparing it with an old cohort who never interacted on online forums, 77% received average or below average, but only 7% secured highest grade. It indicates that introducing ADF in blended environment can advance learners' performance.

In formal learning, learners have used ADF to synthesize course materials, exchange ideas, receive academic support from peers and instructors, to create social communities, to co-construct knowledge, and as an assessment tool (Cheung & Hew, 2015; Gregory, 2014; Lange & Costley, 2015). Whereas in informal and non-formal learning environment, it has been widely used for collaborative learning purpose, in addition to the latter (Khlaif, Nadiruzzaman, & Kwon, 2017; Yang, 2012). The former students of Open University, UK have used it to 'take the distance out of distance learning' (Plumpton, 2005).

## Overview on the Use of CLD

Learning design (LD) articulates conceptual ideas. Practitioners have used it to create sequential activities for attaining educational objectives (Agostinho, Bennett, Lockyer, Jones, & Harper, 2013; Coyne, Evans, & Karger, 2017). Whereas, learners have used different tools for documenting ideas in an organized manner (Rienties & Toeteneel, 2016; Brown & Voltz, 2005). One of the visual-based designing tools is CompendiumLD (CLD) (Celik & Magoulas, 2016).

CLD bridges the ideas for scheming effective learning activities (Brasher et al., 2008). Tactile icons support users to make visual transition (Conole, 2012). According to Brasher (n.d.), "[CLD] remove both the need for the user to have to think about the visual representation of the activity, outcome, output, resource, or tool itself, and the need to learn how to use CompendiumLD, thus allowing them to focus on visualizing the relationships between these items".

CLD has flexible design model. It fosters decision-making and critical thinking skills. Conole et al. (2008) expressed, "CompendiumLD enables its users to visually represent learning activities in a flexible way... The process of mapping a learning activity in this way involves the user in a cognitive process of externalising their understanding of the learning activity. This facilitates and drives development of their own understanding of the nature of the activity, and the map facilitates communication of this understanding with colleagues". It also fosters creativity, and enhances the quality networking. Brasher et al. (2008) highlights, "The tool is intended to aid designers make choices, and plan developments, facilitating creativity and efficiency in the design process.

CLD has been used by the practitioners to design a course, capture curriculum designing process, create and share structured learning activities, improve teaching practices, and to produce new learning designs out of the existing one for time efficient future planning (Papaefthimiou, 2012). They introduce it to learners to foster expressive thinking, problem-solving and decision-making skills (AlMutairi, 2015; Munoz, 2003). They can



also invite learners to co-construct knowledge with them as a designer. Whereas, learners have used it for making a study plan, to brainstorm a design, and to represent regular activities and time schedules (Beetham & Sharpe, 2013). It has helped some of the previous learners of MAODE to articulate and produce structured visual output (Conole, 2012; Brasher, 2012).

## My Learning Experience

### Asynchronous Discussion Forum

Most of the activities on ADF were either self-regulatory or peer-facilitated (Harris & Sander, 2007; Cheung & Hew, 2015). Initially, the tutor guided us on ADF for each learning activity. However, she gradually shifted our dependencies to independencies. She encouraged us to take ownership of learning, which made my learning experience more explicit (Kadagidze, 2014; Xia, Fielder, & Siragusa, 2013). Klopfenstein expressed, "Giving learners more ownership... results in a deeper, more meaningful experience".

Individual activities such as reading articles helped me to take charge of my learning (Beldarrain, 2006). Whereas group activities connected me with peers, tutor and resources. It enabled me to articulate ideas and to refine my viewpoints. I, along with peers also took group ownership, and used tools such as 'Wiki' to carry out collaborative tasks.

According to Martyn (2005); Wang and Kang (2006), effective online discussions require social, cognitive, emotive, and tutor presence. Throughout the module, peers and tutor supported me in a variety of ways. Example, the tutor helped me to develop evidence-based responses by raising critical questions on my forum discussions. Furthermore, interaction with learners and tutor increased my social presence and reduced social isolation (Pendry & Salvatore, 2015; Shaul, 2008).

ADF offers flexible learning situation [time and space] for meaningful participation (Chen & He, 2013). I read forum posts repeatedly at my suitability. I also shared my viewpoints with related examples at my convenience. However, time elapse disengaged me a few times. Example, I expected to receive sufficient feedback from peers and tutor on few of my posts, but did not! That in turn discouraged me to contribute actively for the last few discussions.

On H800, ADF was aligned with a good number of structured tasks (Delello, Everling, McWhorter, & Lawrence, 2013; McLoughlin & Mynard, 2009). Each week, we performed individual tasks, and later participated in topic-driven discussions (Sfard, 1998). Clear guidelines helped me to align course goals with my learning expectations (Clarke, 2011). However, few unstructured tasks resulted in disorganized discussions, which restricted my participation.

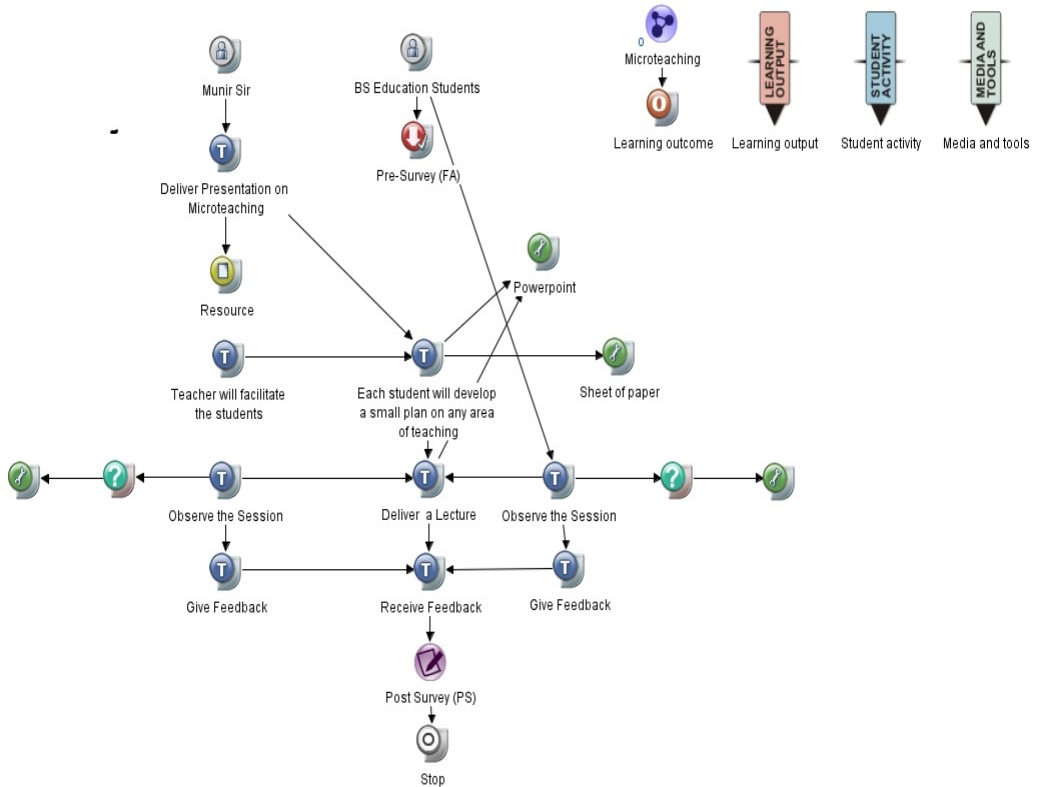
On H800, although participation on ADF was not the part of assessment, it was one of the course requirements. I felt restricted degree and depth of interaction in our tutor group during few of the weeks. As the course progressed, I also observed decline in learners' participation.



## CompendiumLD

I have used CLD for designing learning activities and research plans. My first design was on microteaching. I had shared my design with peers, and received suggestions to improve my practices.

**Figure 1**  
Revised microteaching plan



CLD is suitable to articulate ideas and to represent creative designs. However, few of the technical issues such as difficulty to export design, and its incompatibility with few digital devices has affected my participation. Few of the previous users have also encountered similar issues (Conole, 2010; Conole et al., 2008).

I noticed that CLD do not visualize complex designs. Further, learners may misinterpret design in asynchronous learning environment. In addition, there is no standard template, repository or learning community to share and exchange design with diverse audience.

I found this software less user-friendly as compared to the cloud-based mind-mapping tools, because one cannot collaborate, if both parties are not using CLD. Few of the pre-



vious learners found it time-consuming, and used alternative tools such as Wiki and Googledocs (Beetham & Sharpe, 2013).

CLD offers structured learning activities. Practitioners and learners can use icons to define roles, tasks and resources, and to draw out meaningful sequence of learning activities (Miller, 2014). However, the pre-designed icons do not support all types of learning activities. Further, there is no option to customize or add new icons.

CLD offers ownership to learners and practitioners. They can use it for either personal or academic purposes. However, if it is a compulsory institutional practice, learners may fail to modify the existing design to their context (Dimitriadis, 2009). Example, I felt a hidden workload, when used CLD for one of the structured learning tasks.

## **Suggestions to Utilize ADF and CLD**

Tutors should set clear expectations for self and learners' meaningful participation on ADF (Northcote & Gosselin, 2016; Xia et al., 2013). They should set a combination of student and tutor-centred environment on ADF for distance learning online courses (Zingaro, 2012). In this way, learners can carry responsibility of their learning, while tutors can keep them on track.

I suggest tutors to ensure their active presence on ADF (Abawajy & Kim, 2011; Anderson, Liam, Garrison, & Archer, 2001). They should make themselves available to respond learners' queries in a timely manner. Previous studies highlight that their presence advance learners' knowledge (Cranney, Wallace, Alexander, & Alfano, 2011; Ladyshevsky, 2013).

A combination of student as well as instructor-centered approaches is a doable strategy to engage both in forum discussions.

Participation in ADF can foster critical thinking skills among female learners, living in a culturally restricted society (Jacob, 2012; Williams & Lahman, 2011). I advise tutors to introduce it in a blended learning environment. Tutors can initiate peer-guided learning activities such as debate, to ensure critical thinking construction (Garrison & Cleveland-Innes, 2005).

I propose tutors to catalyze learners' participation on ADF with extrinsic motivation. Example, introducing badges as an incentive can engage learners into quality discussions (Jin, 2017; Jacob, 2012).

I suggest introducing CLD to the postgraduate prospective teachers. They can use it to conceptualize teaching ideas; collaborate with fellows to improve their plans; pre-plan sessions; organize activities, and to manage their work well in time. Brasher used CLD to conceptualize teaching plan on the Middle East politics using role play. I propose teachers to introduce CLD to shift learners focus from content to activities and experiences (Conole, 2014).

I recommend CLD for online distance learners to share project and tutor-marked assignment plans with peers and tutors.

I also recommend CLD for the postgraduate research students. The visual treat allows learners to brainstorm and share ideas with the research communities. One of the members of the International Compendium community expressed, "Compendium is my



utility of choice to organize my thesis research. The visual layout allows me to immediately pick up my research train-of-thought even after a lull period" (Matthew, 2011).

I further suggest introducing CLD to the high school learners as a brainstorming strategy for designing projects. Learners can conceptualize ideas on CLD, and later share their project plans with online learning communities. They can also receive feedback to develop creative projects.

## **Conclusion**

Overall, ADF and CLD supported my learning in many ways. These tools empowered me with decision-making and critical thinking skills. I used both the tools with clear purpose, and aligned course goals with my expectations. Not only did I gain skills, but also shared learning with others. Discussion groups and mind mapping tools should be conceptualized as active learning strategies as these can empower learners to take ownership of learning. These can also develop critical thinking, generate new ideas, and deepen students learning. Thus, these tools have potential to engage other online distance education learners.



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