Flipped Classes and Micro-learning for Language Development A Practitioner's Experience

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1. Introduction

In an increasing global and dynamic world, knowledge acquisition is no longer a one-time activity to be done in colleges. Learning can no longer be divided into a *place and time* to acquire knowledge and *a place and time to apply* the knowledge acquired. It is now imperative that learning becomes a life-long activity that contributes to the professional and personal growth of learners as they move on to become professionals in their chosen field, propelled only by self-motivation.

Conventional training deals with *face-to-face teaching and learning* with activities for consolidation given as homework. Shortage of subject experts, along with the need to keep training costs low, high employee attrition, reduced attention span of learners, need for relevancy with day-to-day job content makes conventional face-to-face training a less preferred approach for training, especially for professional development. In its place, a number of pedagogical approaches have come to stay – eLearning, flip classrooms, blended learning, micro-learning etc are a few.

ICT in education has become popular and cheap – it has the potential to make classes available 24x7. This leads to a model where education is *less about teaching* and *more about learning*; where the learners can learn *for and by* themselves, at their own time and pace. i.e. becoming more student-centric and less teacher-dominated.

The present article will discuss about how technology can be used as an enabler with new pedagogical approaches of flip classrooms and micro-learning, especially for gaining fluency in English for teachers. It will discuss the practical experience of integration of all the 3 – relevant content, micro-learning pedagogy and real-life application in the realm of schools and classrooms.

2. Needs analysis - Present Scenario

Teachers who teach English and who teach in English are expected to deliver their lectures in English, elicit responses from the class and guide the students to achieving higher levels of skills in English. This practice in the classroom, on an everyday basis, ensures that students can skilfully process information presented to them in English, analyse, evaluate and use it to solve problems.

However, it has been observed that due to the limitations of use of English in the classrooms, most first-generation English learners in schools often find it challenging to study in English because processing content in English takes more cognitive capacity, leaving less room for skilful, higher order thinking.

We set out to build the capacity of teachers to teach in English using the pedagogical concepts of micro-learning, flip-classrooms, promoted by 1-1 coaching of teachers, who become learners for the duration of the programme. Enabling teachers to teach in English has a multiplier effect as each academic year, they teach multiple cohorts of students. It is imperative that teachers themselves are proficient in English, as most first-generation learners have no other support available to them apart from schools.

3. A brief about the concepts referred

3.1 What is a flipped class?

In a flipped class, the main stages of teaching and learning that are synonymous with classwork and homework respectively are reversed. Flipped classrooms utilize a form of blended learning where learners study the material individually in their private time and space. Often, difference in cognitive abilities of a class means that different students take different lengths of time to understand the content. Ability to study at their own time and place with unlimited access to the material means students can often revisit the concepts many times until they are comfortable with it. This leaves classroom time free for practical tasks and doubts clarification by the teachers, making learning more effective and meaningful.

3.2 What is microlearning?

Microlearning, as the name suggests, refers to a learning strategy that uses a series of *very short, focused modules* that offers just the right amount of information necessary to help a learner *achieve a specific, actionable objective*. It is designed to suit present-day learners with short attention spans and avoid cognitive overload. Its approach is learner-centric; it is delivered in various media formats (videos, text with animation, audios, interactive software etc) and it can be delivered via multiple devices from tablets, Smartphones, laptops and desktops.

4. Why choose microlearning and flip class over conventional training?

4.1 Learners' expectations

An important phenomenon is the change in the ways in which people learn – attention spans are getting shorter and learners expect more from training. They no longer want to just gain knowledge, they want to be engaged, entertained and able to apply what they learn immediately. They want to see improvements and be able to quantify their progress. They want to be in control of their learning journey.

Conventional training often happen outside of learners' day-to-day contexts, are of longer duration, and are more difficult to apply knowledge to specific on-the-job objectives. Microlearning lets learners to use recent learning to their current needs, making the training even more relevant to their work. This learner-driven nature of microlearning increases engagement, improves training and job efficiency, and builds learner interest to enrol in training.

4.2 Social aspect

The hybrid model is also recommended from a social aspect – in a face-to-face training session, the participants are mostly colleagues – it is a socially sticky situation if a senior teacher is corrected in front of his/her junior colleagues; in a similar vein, teachers who are not very confident about their ability or knowledge seldom actively participate. In certain sessions, gender plays a crucial part in participation.

4.3 Mentor interacts with every learner

Learning or honing English mandates close interaction between learner and the mentor. In a conventional approach, the mentor/trainer rarely gets the opportunity to interact with each learner in the cohort; learners who need the most help are usually reticent; the hybrid model helps every learner with the same amount of mentor-time; this offers the learner anonymity and privacy to practice English with the mentor, make mistakes and learn from them.

4.4 Power to the learner

Learners control their own learning – at their own pace, when and where to study within the time limit set for a lesson; continuous access to material allows learners to revisit the concept as many times as required until they are comfortable with it. This increases learners' responsibility for their own learning. They become active participants as they have to learn to manage time, become more self-directed and motivated than in a traditional classroom environment.

5. Project Teachers' English Fluency Development (TEFD)

Project TEFD combines micro-learning with the flipped class approach. The project was implemented across multiple cohorts of teachers to promote English language fluency.

The objective of this programme was to enable teachers to:

- understand principles of learning and teaching in English, and relate these critically to their own practice
- conduct a regular class in English, while also being able to adapt the language to handle classroom situations efficiently.
- use appropriate language during preparation of professional material viz. lesson plans, students' assessments etc.
- develop their personal practice skills, enriched by ideas and experience from external sources.
- learn collaboratively, supporting and supported by their colleagues.
- learn functional English i.e. learn in context and have an opportunity to immediately apply what has been learnt, in practice.

5.1 TEFD Process

Micro-learning: Close skills and knowledge gap

Lessons in short bursts; Just-in-time; At the teacher's time and place; Better retention Evervda Smartphone Periodic interactions Download app Activities for use in a Access App for lesson classroom • Commit 10 min/day • Practice @ home Complete assignments / Regular interaction Apply it in the classroom • Have a practice buddy Clarify on Whatsapp Sign-up Firm-up

In this programme, each level has 60 mini-lessons. Learners access and learn content, before they talk to their mentor. Each mini-lesson focuses on one concept, is compact, focused on a specific learning objective and is delivered as a quiz, video, audio, infographics etc., which engages the learner for approx. 15 mins. Each lesson is preceded and followed by short quizzes or questions that need an audio answer. These mini-lessons reduce the cognitive overload for the learner. Each learner is assigned a mentor, who motivates the learner, helps to understand the concepts better and provide 1-1 practice.

This hybrid approach espouses the fact that language learning cannot be accelerated in a few hours, rather it is best learnt over a period of time; retention is higher when it is practiced. When the learners access micro-lessons, they aren't overwhelmed; rather these micro-lessons give them time to absorb one concept, apply in their classrooms before moving to the next.

5.2 TEFD Content

Choosing what content to create for a micro-learning environment is key. The following questions were considered for creating the content.

- What should the learners know and understand in order to start using English as an instructional language in the classroom?
- What are the most common mistakes teachers make that affect their students' understanding of English?
- What are the 3 or 4 most important things that learners should not absolutely forget?

5.3 What was expected from Learners?

Learners who enrolled in the programme were expected to:

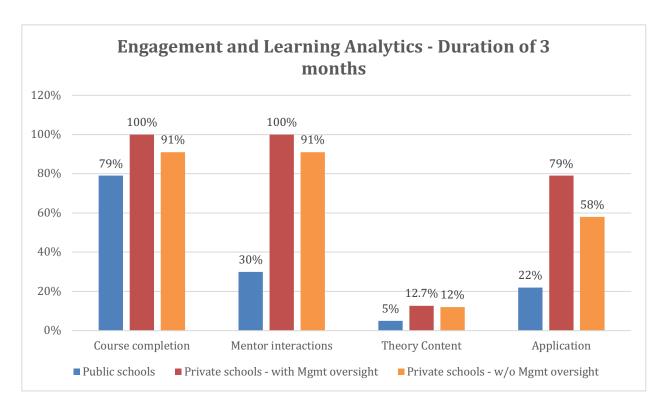
- Have a basic reading and comprehension skills in English at Grade 5 level
- Possess a Smartphone with internet connectivity
- Access the lessons every day, complete all parts of the micro-lesson including assessments
- Complete weekly assessments, and capstone projects.
- Be prepared for interacting with the mentor.
- Display evidence of learning, practice, and reflection throughout the duration of the Course.
- **Evidence** of learning:
 - Completing assignments, assessments, projects.
 - Attending mentor sessions.
- **&** Evidence of practice:
 - Submitting video assignments (at least 3 videos for a level)

6. TEFD Findings

The above model was rolled-out to approx. 1000 teachers, from both private and government sector(s) and from teacher training colleges.

Learners watched videos, listened to audio lessons, checked their knowledge by taking tests, posed questions in the Whatsapp forums for clarifications; time with the mentors was devoted to clarifying pronunciation and grammar issues that caused difficulties, and submitted audio and video evidence of application in the classroom.

Initially, the students reported that they found it hard to adjust to the format of the programme but generally came to appreciate it for three main reasons: (1) immediate feedback, (2) possibility to revisit lessons and (3) time to develop their critical thinking about topics before mentor interaction.



The learners were tracked on the following parameters:

- Engagement [Completion of all mini-lessons, Mentor interactions]
- Learning [% improvement of scores at end-line over baseline values, Application]

6.1 Discussion on the findings

A survey was conducted among the learners to determine the degree of comfort with the learning format.

Learners who were able to demonstrate learning:

- Planned to learn every day, by setting aside some time
- Even if they lagged behind, they ensured that they completed the lessons in a reasonable timeframe
- Applied it immediately at school
- Started to use English in teaching, where they were none earlier
- High engagement level with the mentor, including planning for mentor interactions.

Learners who were not able to demonstrate learning:

- Very little skills in English [especially reading and comprehension]
- Difficulty with self-discipline to organize their learning time
- Cited lack of time [use of personal time for professional development]
- Unable to use technology for learning unfamiliarity with Smartphone, internet etc
- Preferred conventional learning format with hand-outs over interactive, micro-learning format that demanded application evidence
- Resisted follow-ups regarding their progress, performance and need to demonstrate learning

Mentors who supported these teachers mentioned that:

- Learners who were actively engaged did very well by demonstrating a high level of learning
- Some reticent learners found 1-1 sessions agreeable

- Older learners were less receptive to feedback or to move away from conventional learning.
- Interestingly, young learners (who were still enrolled in teacher training colleges) preferred conventional teaching method.
- Some learners found content complex and wanted more time to answer questions.

Overall, it was observed that

- Learners who were cohorts from schools whose leadership was actively engaged demonstrated significant progress in learning and application;
- Individual learners who signed up for the programme (without management oversight) progressed well in the learning but lagged in application behind their counterparts whose management supported them
- Learners who interacted regularly with their mentors showed significant progress in learning.
- Learners with buddies fared better than those without.

The programme has to be enhanced to include the following:

- Support the learner with buddies/personal calls in the first week of sign-up to promote early success
- Management / school leadership support or participation is critical for success.
- Application videos should be shared with new cohorts to promote/encourage ideas for implementation.
- Since the 1-1 interaction with the mentor motivates the learner to stay on track, ensuring that learners do interact with the mentor is very critical.

7. Conclusion

When learners, especially teachers, are introduced to a well-designed microlearning platform that engages and motivates them, this *learn-anywhere-anytime* concept is a paradigm shift for the teachers as it leads to lifelong learning and professional development. And this need not be limited only to language learning. However, cultural and societal challenges that exist, especially with older learners and women, have to be dealt with empathy. When teachers take on responsibility for their own professional development, such empowered teachers will ensure that the next-generation of students leave school with confidence and with required skills to deal with higher education and subsequently, employment.

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