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DEEP LEARNING MODEL TO MEASURE THE INVOLVEMENT OF LEARNERS AND ENGAGEMENT DURING THE E-LEARNING

ABDULKAREEM AL-ALWANI

ABSTRACT

Several challenges are associated with online learning systems, the most significant of which is the lack of student engagement evaluation in various course activities. This paper presents new approach to measure and evaluate the engagement level and interest level of students taking online courses or distant learners. It introduces an end to end deep learning model that can measure engagement by a feed from a webcam. It focuses on improving quality of learning and performance of students during exams. The proposed method is based on minimum mutual information for comparing with the reference and current state and in each step, facial extracting method (hierarchical deep neural network), Fuzzy mathematical and statistical method are used. The experimental results shows how the proposed method improves the both the engagement and comprehension of the course material. Also how the proposed method help students to deal with the course with higher engagement rate and less difficulty rate.

Index Terms: Student's engagement, deep learning, facial extracting and fuzzy method.

I. Introduction

There is continuous growth in online or distance learning. Imparting excellent education and creating tools to measure various aspects of the online learning environment are very important to improve different online learning process elements. Student engagement defined as, “the extent to which students actively engage by thinking, talking, and interacting with the content of a course, the other students in the course, and the instructor”. [1]. However, in online classroom settings where the use of information and communications technology, or technologies (ICT) continue to stand at the forefront in comparison with traditional teaching tools, assessing student/trainer engagement becomes a complex challenge. Using exams and homework questions as a measure of engagement is simply not the answer; this is precisely why educators need a modern a solution to combat this concern.

Another challenge faces the modern educators is short attention spans and constantly waning focus. In a world where personal electronics and social media keep young minds preoccupied, it becomes even harder for teachers to ensure that their students/trainers are paying attention toward the learning material. Without any system in place, there is no key measurable indicator to find out if a student/trainer has been taking interest in learning or not. By the time exams arrive, it's already too late.

From these points, our contribution in this research presents a new method for evaluating all students performance based on facial extraction during the e-learning. The new method proposes an interactive teaching by integrating Automated system to measure the involvement of learners and engagement (ASMILE) into your online classroom and crafting a student/trainer experience which stands on the foundation of productivity, engagement and retention of knowledge. Not only that, as we accumulate data related to student/trainer behaviour toward learning material and techniques, it will help us in extracting broad insights through deep learning shaping a better future for education for all types of learners. The proposed method required simple preprocessing, as feature extraction is done using Neural Nets.

The research organized as follows: this section discusses the research introduction. Section 2 presents the literature review. Section 3 presents the research methodology. Section 4 implements the experiments and analyzes the results. And finally section 5 presents the conclusion.

II. Literature Review

The amount of engagement exhibited by students is related directly to the quality of the learning and the amount of information retained by the student. “The test of successful education is not the amount of knowledge that pupils take away from school, but their appetite to know and their capacity to learn.” Sir Richard Livingstone, 1941 [2]. Since 1980s student interaction has been a key topic of education studies. Early studies came out as a result of high dropout rate of 25% to 60% due to boredom and disengagement [3], [4]. Such studies forced educational institutes to enable student engagement not only for good grades but as a goal itself [5]. There exist many learning settings, other than traditional classrooms, such as educational games, intelligent tutoring systems (ITS) [6], [7], [8], [9], and massively open online courses (MOOCs). That can make use of student engagement for producing better and firm content making sure the maximum capacity is delivered to the students.

Fredricks, et al. [10] proposed 3 different forms of engagement: behavioral, emotional, and cognitive from 44 studies. Anderson, et al. [11] categorized engagement into behavioral, academic, cognitive, and psychological dimensions. ASMILE allows the measurement of the students’ reactions to the material to understand points of confusion and comprehension alike.

Traditionally, surveys and questionnaires were main tools to analyze student engagement. Some of them required student to fill them out [12], [13], [14] while others were filled by teachers and external entities depending upon contribution of the student [16]. Advancements in technology and computer processing power, have allowed for more robust computer vision techniques, which can be applied to produce state-of-the-art results as in iEnguage [15]. The advent of processing power has allowed the development of ASMILE to run concurrently during a class.

Abidi et. al. [17] used machine learning (ML) algorithms to identify low engagement students in a social science course at the Open University (OU) to assess the effect of engagement on student performance. The input variables were highest

education level, final results, score on the assessment, and the number of clicks on virtual learning environment (VLE) activities, which included dataplus, forumng, glossary, oucollaborate, oucontent, resources, subpages, homepage, and URL during the first course assessment. The output variable was the student level of engagement in the various activities.

In Ali et. Al [18]. They analyzed the data logged by a technology-enhanced learning (TEL) system called digital electronics education and design suite (DEEDS) using machine learning algorithms to predict the difficulties that students. The machine learning algorithms included an artificial neural networks (ANNs), support vector machines (SVMs), logistic regression, Naïve bayes classifiers and decision trees. The input variables of the current study were average time, total number of activities, average idle time, average number of keystrokes and total related activity for each exercise during individual sessions in the digital design course; the output variables were the student(s) grades for each session.

In Hew et. Al [19]. They used a machine learning classifier to analyzed reflective sentences posted by students. they described six specific themes found across the entire data corpus: (a) structure and pace, (b) video, (c) instructor, (d) content and resources, (e) interaction and support, and (f) assignment and assessment.

The Shortcomes of the current researches:

1. Evaluating the students' engagement in assessment, course design, teaching experience, and teaching style and using this to recommend materials and lectures to help students achieve higher grades on the final exam. [17]
2. Using different algorithm to study the learning behaviors of students during their interactions with the online courses with the goal of helping instructors to improve the performance of underprepared students. [18]
3. Examine causal effect between course effectiveness (e.g., learning performance) and students' expressions. [19]
4. Exploring student disaffection may offer information that can complement the overall understanding of student engagement. [20]

III. Methodology

A. Proposed System: ASMLE as a Tool to Measure Involvement of Learners and Engagement

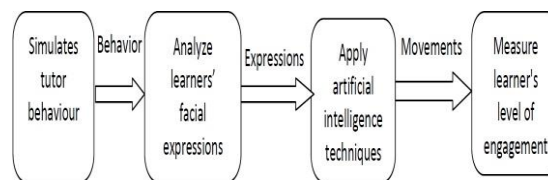


Fig.1. System steps

The Automated System to Measure the Involvement of Learners and Engagement or ASMLE as it is called is a revolutionary innovation in the educational arena which is set to change online learning experiences and ensure that their desired outcomes are successfully met.

As presented in Fig. 1., ASMLE essentially simulates tutor behaviour in online learning environments by analyzing learners' facial expressions and emotions in real-time. By utilizing the latest developments in Artificial Intelligence, the deep learning algorithms critically examine movements such as Pupils, Inner Brow Raise, Brow Raise, Brow Furrow, Nose Wrinkle, Lip Pucker, Lip Press, Lip Suck, Mouth Open, Chin Raise, Smirk, Eye Closure, Lid Tighten, Jaw Drop, Cheek Raise, Lip Stretch and many more to arrive at a learner engagement calculation.

The proposed system is utilizing Histogram of Oriented Gradients HoG face detection as implemented in Dlib. The image is resized to 250x250 and pixel values are normalized between [0,1]. This process allows improved accuracy and reliability of measurement throughout the observation period.

Present methods use models based on AlexNet and ResNet. We present an ensemble of feature extractors in Convolutional Neural Network. Different size of kernels allows extraction of multi-level features. 5x5 kernels allows to create a high-level representation of the input image while 2x2 and 3x3 extract fine grain details, all the feature maps are combined and pooled globally. It uses a combination of max pooling and strides to extract features with every detail. This feature map is passed to fully connected layers that produce a score for engagement level as predicted from the given input image. This

ensemble approach improves the validity of the results and creates a holistic framework for the researcher.

To maximize the usability of the product, ASMILE has been designed to act as an add-on to existing e-learning systems and is compatible with standard browsers such as Chrome. Since the data is key, ASMILE enables assessment of comprehensive e-learning material by indicating which parts of the curriculum the learners are most interested in. This tool facilitates curriculum development processes by helping educators uncover key statistics such as average learner engagement that can provide useful insights regarding learners' comprehension of online content. From the learner's perspective, ASMILE has been designed to automatically send notifications when concentration levels decline thereby, encouraging learners to maintain attention and absorb information. Results produced by ASMILE are highly meaningful as educators can analyze individual students/trainers as well as the entire class as a whole. The system calculates real time engagement for each learner using a CSV file where each feature is updated every 3 seconds. Data is presented through charts to summarize gathered results and give further insight into learners' behaviors.

ASIMILE can be used to measure learner's level of engagement during the class and notify them when they are not paying attention. It can also be used to assess the quality of e-learning material highlighting parts of the course that are more engaging for students/trainers and those that induce boredom. It can send engagement reports for the entire class empowering teachers to improve learning quickly and efficiently. From educator's perspective, the great advantage is that ASMILE is not an independent e-learning system. It actually augments existing e-learning systems working as an add-on. As a Python script, it can be integrated into any e-learning online system to deliver required results. What it means for institutions and teachers who rely on e-learning is that they don't have to invest their time and money in replacing one system with another. They can simply integrate ASMILE into their current e-learning system. ASMILE providing a complete dashboard for teachers, students and parents to review engagement reports all student in all e-learning activity he/she have been already set.

Sample of System Screens:

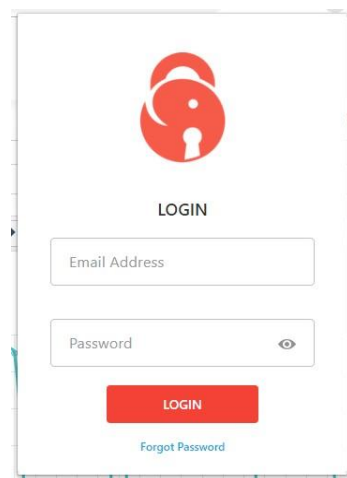


Figure 2.a. : ASMILE chrome extension



Figure 2.b. : ASMILE during online session

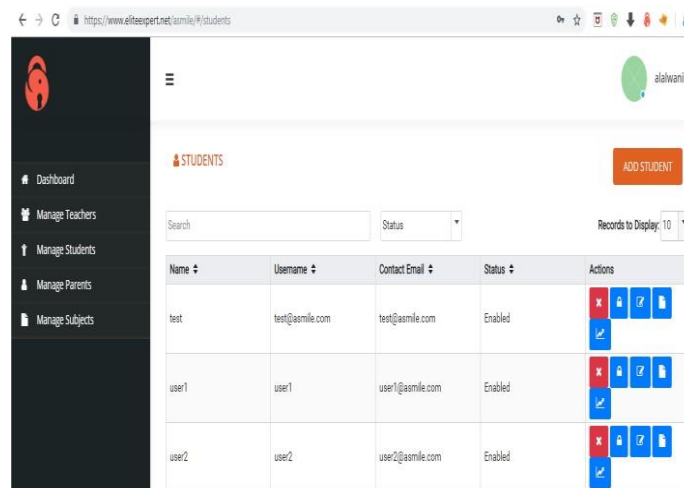


Figure 2.c.: Teachers dashboard

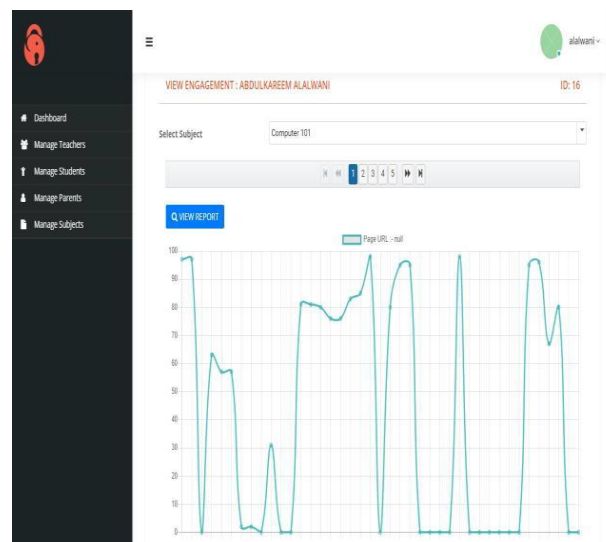


Figure 2.d.: Example of engagement report

Fig. 2.a. shows the system login page which can add as an extension to Google chrome. Fig. 2.b. shows activities during online session. Fig. 2.c. shows the teachers dashboard which includes different activities such as adding students, tests, Fig. 2.d. shows an example of engagement report for each student.

B. The proposed algorithm

This system includes many subsystems which is a closed-loop and upgraded in real time. For example, if there are 100 students in the lecture, this system includes 100 subsystems and each subsystem is one closed-loop. In order to study whole system, first, we think about one closed subsystem (about one student) and then expand whole system. The e-learning system including the lecture and many students can be described as the following Fig.

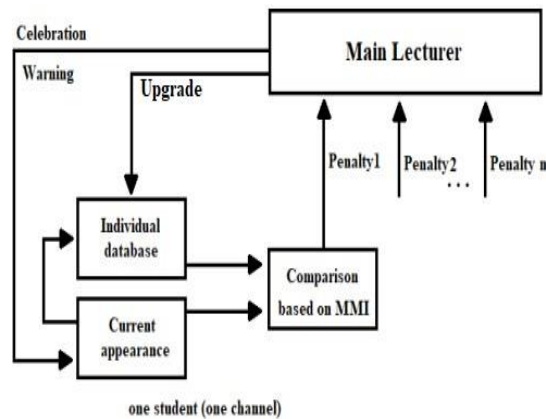


Fig.3. Total System Structure of suggested method

One student is one closed loop. So first, we suggest the method for processing the one student’s information and penalty matrix and expand it to all students. In the Fig. 3., Penalty1 means the evaluation for one student. Totally, n Penalty matrix is obtained for n students. In the following 4 steps, all information is gathered, and total decision is achieved.

1. Reference (Criterion) creation for Maximum Concentration according to each student (one channel) ---creating first basic individual database.

Purpose: For comparing with the reference and real state, creating the criterion obtaining

Input: appearance of each student with high concentration

Output: vector matrix for facial characters of each student

1.1 Decision of different situations: listening to lectures, thought, solving problem, speaking according to the main four cases, the following characters are stored in basic individual database, but this process must be carried out under the care of lecturer with high concentration.

-Main Characters Recognition--eyes direction, eyebrows, lip Angles, Head position

-Other Characters Recognition such as Inner Brow Raise, Brow Raise, Brow Furrow, Smirk, Cheek raise...

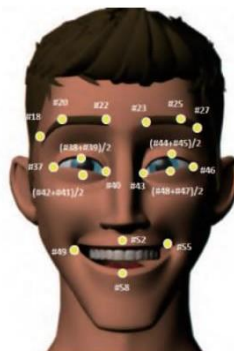


Fig.4. Set points for Main facial extraction

-Main algorithm

Despite many studies, the recognition rate is still not high enough, due to the influence of various environmental changes such as lighting and accessories as well as the difference in the characteristics of individual people. Here, Algorithm based on hierarchical deep neural network is used. We propose an efficient algorithm to improve the recognition accuracy by a hierarchical deep neural network structure which can re-classify the result, which is the most frequent error. The appearance feature-based network extracts the holistic feature of the Local binary pattern (LBP) feature containing the action unit’s information. The geometric feature-based network extracts the dynamic feature, which is the face landmark change centered on the coordinate movement between the neutral face and the peak emotion. As a result, we constructed more robust feature by combining static appearance feature from the appearance network and dynamic feature from the geometric feature-based network as described in Fig.4

1.1 Preference Decision: When person is keen on something or understands something well, the order of facial impression is different according to people. So, it is important to define the Preference Decision. For example, when I understand something well, my mouth is opened wide, first and then eyebrows raise...in this way...In order to this value, the most popular method, Mamdani fuzzy method is used. For example, the student opens his mouth wide (A) and his eye wide (B) and the result is (C) (A, B and C can be in different expressions). In order to explain the working with this model of FLC (Fuzzy Logic Control) will be considered the example where a simple two-input one-output problem that includes three rules is examined [20 and 21]:

Rule1 : IF x is A3 OR y is B1 THEN z is C1

Rule2 : IF x is A2 AND y is B2 THEN z is C2

Rule3 : IF x is A1 THEN z is C3.

After that, through Fuzzification, Rules evaluation, Aggregation of the rule outputs and Defuzzification, the final value is obtained.

As a result, Sample Preference must be existed about understanding and concentration. This problem is solved by correct evaluating of another person.

Totally, in this step, database is saved as a matrix form.

2. Current facial extraction according to each student (one channel)

Purpose: For comparing with the reference and real state, creating the current state obtaining Input: current appearance of each student during the lecture

Output: vector matrix for facial characters of each student in real-time

This extraction must be conducted in real time after beginning the lecture. Of course, here, extraction algorithm is same as the previous step. So, the errors become smaller according to the used algorithm. And our algorithm must be robust about all disturbances.

Finally, in this step, matrix form is obtained [22].

3. Comparison with Reference and Current facial extraction base on Minimum Mutual information-decision penalty function (cost function)

Purpose: obtaining the evaluating value for each student by comparing with the reference and real state Input: two database matrices for reference and current state

Output: penalty matrix for each student in present time

3.1 Penalty values obtaining from one channel

This step is very important. In this step, comparison with the reference database and current states is done by the method based on Minimum Mutual Information (MMI). If there are a lot of MMI, the student is a person who attends his lecture very well. So, if you use an algorithm to minimize the mutual information of two databases and obtain the output, it represents the carelessness of the lecture-penalty. The idea is represented as the followings [23]:

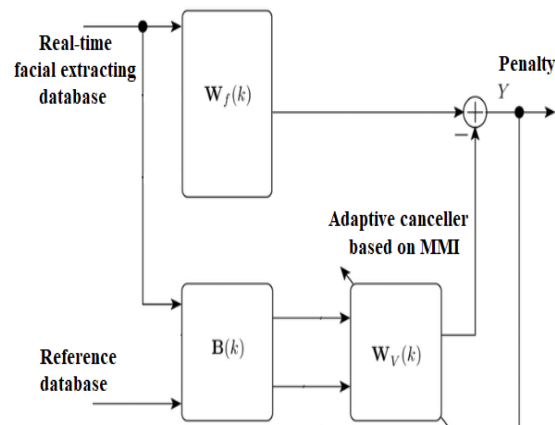


Fig.5. Penalty obtaining by using the MMI

In this step, multiple variables probability function is used to process matrix including facial extraction indexes. As you see in Fig. 5., Mutual information between the Real-time facial extracting database and Reference database is removed by using the adaptive canceller. For this, Sylvester matrix is used. So, penalty function-carelessness for the lecture is obtained.

3.2 Weight function Decision: In real situation, the Preference is given about the all obtained Penalty values. Weight function is made about the Preference. In order to obtain the weight function, fuzzy mathematical method is used. Fuzzy membership is decided as Takagi-Sugeno Fuzzy model.

The result is sent to the Lecturer computer through the network [24].

4. According to Multiple Channels, Making a final notification

Purpose: final evaluating and giving the message to each student from integrated information analysis

Input: penalty matrix for every student and itself information value

Output: final penalty message for every student (final penalty value)

This part is important for determining the correct warning about the carelessness and celebration for concentration on the lecture.

4.1 Lecture level decision by itself: Students' concentration depends on the lecture level and method crucially. So, at the beginning the lecture, the main target of concentration percentage is pre-decided with simple questions and answers. Receiving the penalty values, if whole concentration percentage becomes smaller than minimum value,

lecture order must be changed. The minimum value and the main target of concentration percentage have to be decided from different conditions such as the lecture target, persons' knowledge degree, weather condition and so on. That is, artificial intelligence method is used [25].

4.2 Decision of personal engagement messages. There are four kinds of messages:

First, Take care of this lecture, please: This message flows on the student's screen.

Secondly, concentrate your lecture!: This message is red one and fixed on the student's screen.

Thirdly, What are you doing now? And bell rings for the student only: This message is very active on his screen.

Fourthly, Thanks for your concentration: At the end of the lecture, this message is sent to the good student.

In order to distinguish these kinds of messages, the system collects penalty values from multiple channels and calculates the statistics values at a certain time step. If it uses a moment value, its value can be false. So, the student is stressed during the lecture. And then, it can decide the kind of message and transmit it to the definite channels. When a student's concentration is better than his reference database, it orders 'upgrade' and the database is upgraded with new information [26].

Finally, the system is executed automatically as a closed loop.

IV. Experiment And Results Discussion

The test setup included a split test with an exposure methodology to measure the effects of the ASMLE extension. Participants in the test were randomly assigned to either the test or control group. Those in the test group were informed of that the ASMLE software would be used throughout the training course, while those in the control were not made aware of the ASMLE software. The course time was measured and then arbitrarily assigned into 3 equal sections for comprehension testing; sections 1, 2, and 3 of equal time increments.

After completing the course, each candidate was provided with a survey. The first 4 questions were designed to measure the level of comprehension of the course. The Hypothesis is that those in the test group, who are aware of the ASMLE software, will pay more attention to the course and will comprehend the material better. The 5th question is designed to understand the efficacy of ASMLE and understand the ability to accurately assess the engagement based on facial expressions. This question was designed to identify areas of difficulty in the course, and on the backend review the ASMLE evaluation to understand measurement accuracy.

As shown from p-values in tables 1 and 2, the Results show the support that the ASMLE software improves the both the engagement and comprehension of the course material. Comprehension was higher among those in the test group, and results were statistically significant. Also, we find that those in the test group engaged more with the material based on the engagement time in the course.

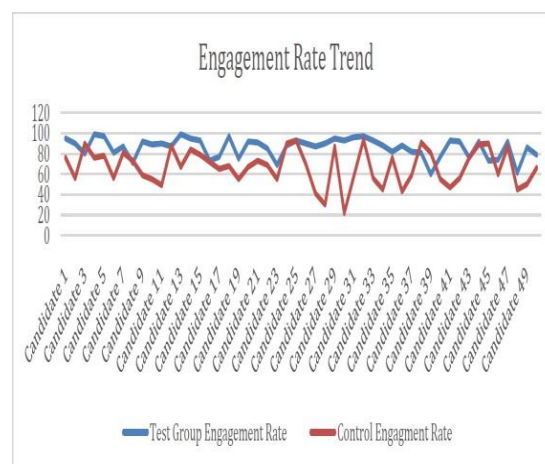


Fig. 6.: Engagement Rate in test and control groups

TABLE I: STATISTICAL P-VALUE FOR STUDENT'S COMPREHENSION

	Test	Control
Mean	3.48	2.52
Variance	0.5	1.2
Observation	50	50
Hypothesized Mean difference	0	
df	83	
T Stat	5.3	
P(T<=t) two-tail	0.000	

TABLE 2: STATISTICAL P-VALUE OF STUDENT'S ENGAGEMENT

	Test	Control
Mean	86.04	66.96
Variance	90.4	298.4
Observation	50	50
Hypothesized Mean difference	0	
df	76	
T Stat	6.8	
P(T<=t) two-tail	0.000	

The base engagement rate was calculated automatically by the ASMLE system. We find that the test group had a higher engagement rate than the control group as shown in Fig. 6. Based on the comprehension engagement rate, we find that the test group had a 19-point higher rate, on average, than the control group. In conclusion, as shown in table 3, the test group had less difficulty with the course since they were more engaged than the control group. Fig.7. shows that the control group found that the course was more difficult consistently across the course, highlighting the efficacy of the ASMLE software to increase engagement.

TABLE 3: STUDENT'S FEEDBACK OF QUESTION 5

(WERE THERE ANY SECTIONS OF PARTS OF THE COURSE YOU FOUND TO BE DIFFICULT.)

	Overall		Which part?		
	No	Yes	Part 1	Part 2	Part 3
Test Group	32	17	4	5	11
Control Group	16	34	7	12	26

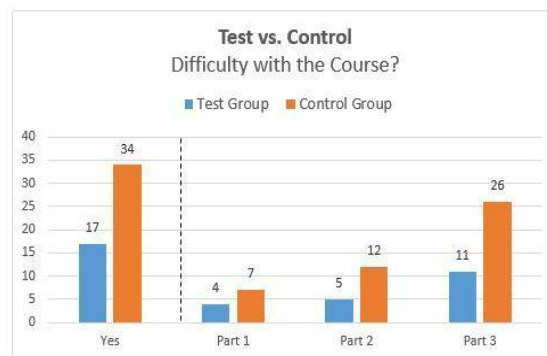


Fig. 7.: estimated course difficulty in two groups

V. Conclusion

In this paper, we suggested a new method for evaluating all students based on facial extraction during the e-learning. In particular, crucial decision for carelessness is obtained with the comparison based on Minimum Mutual Information between the reference and current state. The experimental results showed ASMLE software statistically improves the both the engagement and comprehension of the course material. Also ASMLE software helped students to deal with the course

with higher engagement rate and less difficulty rate. Finally, whole system idea for e-learning auto-supervision is established newly. In the future, this system idea will be widely used in this field.

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GENERAL BUSINESS MUSICIANS: INSIGHTS ON LEADERSHIP DURING INITIAL GROUP FORMATION

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ABSTRACT

This exploratory, qualitative study investigated the initial formation of general business (GB) musicians. The findings of the study suggest that during initial GB band formation, direction-setting, expectations, and norms are of critical importance. The findings are almost identical to the existing research on initial group formation, which suggests that GB bands operate in a way that is similar to groups in more formal organizational settings. The results of the study highlight several implications for GB band leadership to consider, both during recruitment as well as during initial GB band formation.

Keywords: groups, formation, musicians, bands, GB, general business, music, education, leadership

Introduction

This study explored the initial formation process of bands of General Business (GB) musicians. Berklee College of Music (n.d.) discusses a wide range of career opportunities for working musicians. One of these opportunities is called the GB musician, characterized as one who “maintains a diverse portfolio of musical material, granting them the ability to perform in virtually any situation, from weddings to private and corporate events” (Berklee College of Music, n.d., para. 4). GB musicians are professional instrumentalists and vocalists with a substantial repertoire of popular songs spanning various time periods, genres and styles. It is very common for bands of GB musicians to form, in which members are very consistent from season to season. These GB bands work with a booking agency and have members who are hired on a more permanent basis to make sure that the promotional items match the actual product of the band. Research on GB bands, their formation processes, and how band members learn to work together does not currently exist. As such, the intent of this research was to provide insights on GB bands’ initial formation processes. Often, a new approach or perspective in one area of study can help to inform other areas of study. Academic management courses, for example, regularly make use of team sports as applications to help the learner better understand how team processes play out in organizational settings (Grehaigne, 1989).

The goals of this study were to 1) Understand how GB bands initially form, 2) Provide some insights on how GB bands organize themselves, 3) Introduce research that can potentially assist with educating the individual GB musician as well as the GB band, and 4) Gain more understanding about the initial formation of groups in general. For this study, the following research question was explored: *How do members perceive the initial formation of their GB band?*

Literature Review

Tuckman (1965) defines the initial stage of the group process as the ‘Forming’ stage, when group members orient themselves and exhibit testing- and dependence-related motives and behaviors. Similarly, Bennis and Shepard (1974) discuss an initial phase of group development referred to as ‘Dependence–Power Relations,’ where group members experience anxiety. Wheelan (2014) refers to the initial phase of group development as ‘Dependency and Inclusion,’ which is consistent with the first two theories. The idea of a group working together to create a safe environment where members feel free to contribute and express ideas is noted by Edmondson (1999). Although there have been studies focusing on musicians within groups (Phillips & Strachan, 2016), research focusing on the initial start-up of a group of GB musicians does not exist. Analysis of the literature on initial group formation revealed some important themes. Group member anxiety appears to influence many aspects of a group’s initial formation (Bion, 1961; Bennis & Shepard, 1974; Wheelan, 2014). The same is true for expectations (Tuckman, 1965; Gersick, 1988) as well as inclusion and exclusion (Ellemers, 1993; Ellemers, Wilke, & Van Knippenberg, 1993; Ellemers, De Gilder, & Haslam, 2004; Levine & Kerr, 2007).

Methodology

This was an exploratory study with a qualitative approach in order to look for themes that may have emerged from the data obtained (Ravitch & Carl, 2016). The sample consisted of four GB bands of six to seven GB musicians per band, with a total of 25 participants. The meetings of newly-formed GB bands (i.e., within four months of existence) were recorded via video and were observed by the researcher, and each group member was interviewed individually using semi-structured interviews (Wengraf, 2001). Triangulation occurred by analyzing the video, observation, and interview data to make every effort to provide an accurate account of what emerged from the data (Patton, 2005). The previously-noted literature was used to inform and construct the questions for the individual interviews. As the primary researcher, being closely-connected to the work of GB musicians and bands as a GB musician and band manager necessitated the use of researcher memos throughout the study to examine potential biases being brought to the study (Merriam, 1988). Once all data was analyzed, emergent themes were identified.

Results

Analysis of the observational data revealed three emergent themes, and analysis of the interview data revealed six emergent themes. All emergent themes relate to being a GB musician, leadership, norms, comfort, interdependence, expectations, and anxiety. Further analysis revealed four key findings. The first key finding indicates that during initial formation, GB band members enjoy their work, are invested in the success of their GB band, and become more comfortable in sharing their ideas with members of their GB band the more they play together. The second key finding showed that GB band members expect to be paid well, but members discuss not being paid well during initial GB band formation since the focus is on members being able to work effectively together. Third, participants perceive the formal GB band leadership as the initiators of direction-setting behaviors and as the definer of norms during initial formation. The fourth and final key finding suggests that members perceive two different types of norms within their GB band during initial formation, which include band-specific ways of working together, as well as rules of GB band etiquette that apply to being a part of a GB band in general.

These results show that what plays out in a GB band during initial formation is very consistent with the literature on initial group formation, and that GB bands can serve as rich examples of the initial group formation process. Additionally, this study connects with research relating musical groups to more formal organizational groups (Philips & Strachan, 2016; Hadida, Tarvainen, & Rose, 2015; Lim, 2014; Seifter, 2008) by suggesting that GB bands are like the types of musical groups that have been mentioned in the research (e.g., jazz groups). Since it is rare for group studies to include video observation, this study provided an example of the benefits of doing so. The findings of this study suggest implications for GB band leadership to consider, and these include group member expectations, direction-setting considerations, and the establishment of norms.

Implications For Gb Band Leadership

The findings of this investigation suggest that what happens during a GB band's initial formation is very likely to influence its future development. This prognostication is consistent with the literature on initial group formation (Smith & Berg, 1987). Since research on GB bands does not exist, this study is important because it finds that initial band formation is similar to initial group formation in general. Although it is not possible to make generalizations from studies with a small sample size (Patton, 2005), the findings indicate that GB bands could benefit from understanding some of the central aspects of initial group formation. Some of these central aspects include direction-setting considerations, group member expectations, and the establishment of norms (i.e., GB band expectations).

GB band leadership are what Theodorson (1953) refers to as the initiators of their respective GB band. Consequently, the onus falls upon them to address these central aspects of initial group formation with their respective GB band. The leadership literature identifies at least two types of factors to consider when managing a group, which include task-focused factors like setting direction, and relationship-focused factors such as communicating expectations to members or other interpersonal considerations (Robbins & Judge, 2015). Table 1 provides an overview of GB band leadership considerations for this study with a breakdown of the key findings.

Table 1. Gb Band Leadership Considerations: Breakdown Of Key Findings

Relationship-Focused Factors (GB Band Member Expectations)	Task-Focused Factors (GB Band Expectations)
Member Work, Investment, Comfort	Direction-Setting and Norms
Dissonance of Member Expectations	Dev. Norms and Codes of Conduct

The following sections will present strategies for GB band leadership to consider when addressing the key findings of this study as they apply toward their respective GB band during initial formation

Addressing GB Band Member Work, Investment, And Comfort

Participant responses from this study suggest that doing GB work allows for personal and professional development, and that these opportunities can contribute to the degree to which participants like being a GB musician. Highlighting the personal and professional development opportunities associated with being a GB musician could prove to be beneficial for GB band leadership, particularly when recruiting members who are new to GB work. GB band leadership could also highlight opportunities to take on extra roles within the GB band during member recruitment, and this potential for growth within the GB band may be appealing to GB musicians who are looking for personal and professional development opportunities. Personal and professional development opportunities for members are important when thinking about how member commitment can be sustained during initial GB band formation, as the promise of being paid well might not be enough on its own.

According to the findings of this study, being a member of a GB band during initial formation requires a great deal of investment. To address this, GB band leadership should seek out members who are likely to be invested in the long-term success of their respective GB band. This could be accomplished by asking specific questions of potential band members, such as their long-term plans for remaining in their current geographic location, for example. GB band members must also be committed to working collectively to achieve the intended tasks and outcomes associated with becoming a successful GB band. Ultimately, this means establishing a full schedule of performances each year for the GB band. Doing so allows members to rely on their involvement in a GB band as a steady source of income. Conveying this significance during the recruitment process could prove to be beneficial for GB band leadership and potential members alike and doing so can help to screen out potential members who are not willing or who are unable to make the kind of commitment that being in a GB

band during initial formation requires.

Findings suggest that there is an increase in GB band member comfort as the band progresses over time. Increased GB band member comfort might make for an increase of instances where the boundaries of leadership are tested by members, as they might share ideas that conflict with the direction set by the band leader. If this is the case, GB band leadership would need to be flexible in their management of the band, so that as the members of their GB band become more comfortable in sharing opinions, the appropriate outlets and processes are in place to properly manage the increase in individual input. In other words, it would be beneficial for GB band leadership to be able to anticipate the testing of boundaries within their respective GB band, and thus be able to treat it as a normal part of group development. Doing so might also make it more likely for GB band leadership to respond to these instances in ways that set clear limits, but do not shut down or discredit band member reactions. These instances of boundaries being tested during initial group formation are consistent with the literature on group development (Tuckman, 1965). Previous research on initial group development noted a constant testing of the power dynamic between group members and the leader in order to demonstrate expertise and elicit leader-like behaviors from the leader (Bennis & Shepard, 1974). During this time, band leadership can also examine who fits what they are looking for in members of their GB band, and who does not. Since personnel changes may very well be necessary during initial GB band formation, GB band leadership would be able to anticipate these changes and adjust the band as needed.

Addressing Dissonance of GB Band Member Expectations

GB band leadership can benefit from recruiting members who have expectations that are in line with the realities of a newly-formed GB band. Some of these realities include the potential for less pay during the beginning of the formation process, and the requirement of time and effort to prepare for the demands of GB work -- most of which is un-paid (e.g., rehearsals, showcases, meetings, etc.). Being a member of a newly-formed GB band requires a substantial amount of time and effort from all members for the GB band to be successful, and this may involve members having less time to devote toward other musical projects. As such, it would be beneficial for GB band leadership to address these realities when recruiting band members, which can be done by articulating the expectation that GB band membership will need to be treated as a top priority to all potential band members. Overall, GB band leadership can benefit from painting a realistic and clear picture of being a member of a newly-formed GB band during the member recruitment process. Additionally, GB band leadership can highlight some of the personal and professional development opportunities to band members in an effort to keep them motivated during the initial GB band formation process. Doing so, along with the other items mentioned, can help GB band leadership to more effectively manage the dissonance of GB member expectations during this time. Consideration for these relationship-focused factors of their GB band could prove to be beneficial as the band progresses.

Addressing GB Band Direction-Setting and Norms

According to the results of this study, setting good precedents for mutual expectations and norms appear to be pre-cursors of a healthy GB band. Since GB band leadership is expected to set these precedents, it is their responsibility to determine the specific set of considerations by which the band will operate. These considerations may include ways of setting direction for the GB band, managing the progression of the GB band, and establishing how leadership will play out during rehearsals, showcases, and performances.

The findings of this study reveal that GB band members look to GB band owners and band leaders to set direction for their respective GB band, which involves managing the tasks associated with the overall operation of the band. The way GB band leadership sets direction can make a difference, as setting clear directions without being overly constrictive with band members seems to be important to allow room for band members to share ideas when possible. For example, during a rehearsal, a band leader can communicate to members of their GB band how a client wants a specific song to be played in a way that is clear and effective, but also in a way that does not completely rule out any input from members. Direction-setting and norms are critical components of initial group formation according to the results of this study. GB band leadership can formulate strategies ahead of time as to how to set direction and define norms for their respective GB band in a constructive manner, placing value in efficiency over procedure. Since the band leader is likely to be a member of their respective GB band, it would be beneficial for them to establish an active leadership role. The alternative, which would involve the band owner remaining in an active leadership role of the GB band, seems to minimize the importance of the band leader role in the GB band overall, but there may be good reason for the band to be managed in this way. Reasons may include excessive turnover among band personnel, or high levels of interpersonal (i.e., dysfunctional) conflict among band members (Robbins & Judge, 2015). Regardless of how a GB band is run, the ways in which direction is set is likely to influence how norms are established during the initial formation process.

The information provided above illustrates ways in which GB band leadership can work to set direction and establish norms for their GB band. In addition, these implications demonstrate the need for GB band leadership to think about the norms

they want to establish within their respective GB band. These norms, along with the expectations established during member recruitment, will play an instrumental role during initial GB band formation.

Addressing Developmental Norms and Codes of Conduct

Participants in this study described what were categorized as two types of norms that are present and play critical roles during initial GB band formation: Developmental norms, and codes of conduct. GB band leadership can benefit from addressing both kinds of norms during initial formation. During initial GB band formation, developmental norms are generated as a result of GB band leadership setting direction and become the standards by which the GB band operates. As such, it would be in the best interest of band leadership to communicate a clear message of what is needed from members in order for their respective GB band to be successful. Ways of doing this may include placing emphasis on developmental norms as they are created or providing a periodic summary of these norms during initial GB band formation. This could be reinforced by ensuring that these norms are reflected on the agendas for all GB band events (i.e., rehearsals, showcases, performances). The agenda on its own provides the *what* for GB band members, but the developmental norms provide the *how* for the GB band overall. Communicating a clear message of success to band members sets out mutual expectations, and GB band leadership can make use of this message as needed. Findings also suggest that developmental norms are based upon the preferences and style of GB band leadership, which make them specific to each GB band. Since findings indicate that GB band members look to band leadership for direction, it would make sense for band leadership to choose more of a direct style of managing the band. This might include direction-setting approaches to band-related tasks such as *we'll do it this way*, or *this is the best way to do it*. Understanding how developmental norms form, and how they are adopted by band members, can help band leadership make good decisions for their respective newly-formed GB band.

Codes of conduct, such as showing up on time and being ready to go at the start of the performance, generally apply to membership in any GB band, and members seem to gain a better understanding of these as they gain more experience as a GB musician. Since these norms are also defined by GB band leadership, finding a way to communicate some specific codes of conduct during the recruitment process can help with selecting the right band members, as well as with setting clear expectations during initial GB band formation. For example, it is common for GB bands to have a 'No Drama' rule, which implies that all band members are always expected to act professionally.

Overall, the findings of this study suggest several implications for GB band leadership to consider addressing during initial formation. These include implications for the recruitment of GB band members, as well as approaches to managing the newly-formed GB band. By developing a cogent understanding of some of the central aspects of initial group formation, GB band leadership can address what is necessary for their respective GB band to be successful.

Conclusion

Based on the results of this study, there are four applied conclusions. First, direction-setting is very important during initial group formation. By GB band leadership being more conscious and deliberate about direction-setting during initial formation, GB bands could potentially pull together more quickly while also being more effective throughout the initial formation process. Second, norms are established very early on in GB bands. Because this was not a longitudinal study, it is not known if these norms progress or become altered in any way during the initial formation process. Regardless, norms are an important part of initial GB band formation. Third, GB band leadership can benefit from being aware of each band member's commitment level to the band and if members have competing commitments such as original music projects. Being aware of member commitment during initial GB band formation can help band leadership be prepared to make accommodations or adjustments as needed. Fourth and finally, GB band leadership should learn ways to recognize signs of dissonant expectations among members of their GB band during initial formation. This awareness can help GB band leadership set the appropriate direction and introduce norms that will help ease the tensions of members potentially not making much money during initial band formation despite joining the band to make good money. Although these applied conclusions have little to do with the primary objective of a GB band (i.e., playing music), the results of this study suggest that considering group properties such as norms or expectations can make the primary objective that much easier to achieve. Much like any business, the external success of a GB band is influenced by the internal health of the band itself.

If GB bands incorporate aspects of group initial formation much like those mentioned in the literature into their practice, it can be assumed that this would have a positive result, although more research would be needed to draw any firm conclusions. The findings of this study indicate steps GB bands can take during initial formation that might help them work more effectively together, perhaps even becoming established more quickly as a result. Based on the results of this study, there are a number of opportunities to expand the research on initial GB band formation and group formation, and perhaps future studies will aim to do so. This research helps fill a gap for research about GB bands, and because so little research about initial formation of groups exists in the literature, this research contributes to this topic as well. Initial GB band formation draws many parallels to the literature on group formation, and it is hoped that both the bands and the GB musicians who comprise them can serve as models toward understanding group behavior going forward.

Biographic Information

Dr. Adam Payne has extensive experience in the creation, implementation and strategic development of business and leadership development initiatives. With over 14 years of teaching and administrative experience in Higher Education, Payne has presented courses, his research, and his applied experience at conferences and other engagements across the globe. Dr. Payne earned a Doctor of Education in Organizational Leadership from the Graduate School of Education at the University of Pennsylvania. Additionally, he earned a Master of Arts in Industrial/Organizational Psychology from the UNC-Charlotte, and a Bachelor of Arts in Psychology and Statistics from the University of Central Florida.

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CURRICULUM PLANNING PRACTICES FOR GIFTED AND TALENTED CHILDREN: INVESTIGATION OF DIFFERENT CURRICULA IN DUBAI PRIVATE SCHOOLS

AIDA YOUNIS

ABSTRACT

Curriculum planning for the gifts and talents is essential for those students belonging in this category. However, such planning is challenging for schools, especially since gifted and talented students constitute a heterogeneous group. The main aim of this qualitative research is to investigate if the curriculum planning practices in Dubai private schools ensure the growth of gifted and talented students. The curriculum planning practices applied by private schools in Dubai are discussed and evaluated based on the Curriculum Planning Standard, set by the National Association of Gifted Children. Barriers that educators face in curriculum planning for gifts and talents are analyzed. For the purpose of this study, a qualitative comparative analysis is used to examine the differences and similarities among the related practices in five schools of different curricula. The curriculum planning data, collected through semi-structured interviews of teachers and heads of department of different schools, is compared. To enhance the trustworthiness of this research, triangulation is ensured through document analysis of the studied schools' inspection reports, issued by the Knowledge and Human Development Authority. Findings reveal discrepancy and inconsistency among studied schools. Gifted and talented students are not provided with curricula that support their development. As a result, education authorities are urged to support the curriculum planning of private schools in Dubai. Further research is suggested to examine how schools could improve curriculum planning for gifted and talented students, regardless of their implemented curriculum.

AESTHETICS CONTRIBUTIONS TO THE STUDY ON IDENTITY: A CASE OF ADULT EDUCATION

Prof. Dr. ALFREDO CÉSAR DA VEIGA¹

ABSTRACT

The paper starts from the reflection of Alexander G. Baumgarten (1714-1762) who, in his Brief Aesthetics, constructs Aesthetics as a philosophical discipline starting from questions pertinent to the poem. Aesthetics, for him, is the science of sensible things (epistemé aisthété) and it is in beauty and sensitivity that one can seek the truth. With this, he launched the possibility of a mediation between art and knowledge, between education and aesthetics and, therefore, the sensation, for Baumgarten, is not simply a "material" of knowledge, but is itself a knowledge. After this first part, the article develops the idea that this "aesthetic feeling" is present in the adult at the moment in which it is literate, thus contributing to affirm its identity. One cannot say that there is really an "I" in literacy when this adult just copies the models previously established by others. One cannot say that there is really an "I" in literacy when this adult just copies the models previously established by others. The artistic expression always opens new possibilities, it allows to loose the ties and to give flow to the creation, besides to describe feelings and emotions

Keywords: Adult Education; Illiteracy; Aesthetics; Identity.

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The debate around a systematization of Aesthetics as a philosophical discipline goes back to Alexander Gottlieb Baumgarten (1714-1762)², recognized as the first to use the term for the purpose of giving a systematic status to the philosophy of poetry, which he considers a science with the power to bring language to perfection (BAUMGARTEN, nd, p.13). Previous theories could not account for the understanding of aesthetics in a sense as extensive and comprehensive as Baumgarten proposed, such as those that had their origin in Plato, for whom art hid a side even harmful, by its tendency to divert the attention of men from the true essence of beings, fixing it in their fleeting and impermanent appearances. Much later, until the eighteenth century, at least some remnants of this Platonic idealism prevailed among philosophers, especially in the attempt to find answers to the nature and essence of the Beautiful. None of these theories at this point could meet the demand to define art as a special category among ordinary things, and none of them could reflect its unique essence.

Baumgarten innovates by reporting aesthetics to the sensible world, objects and things that can be touched or experienced through the sensations of the body: "my sensations," he said, "owe their existence to the power of representing my soul in function of the position of my body" (§ 534), and thus refer to the totality of our sensible life, the way the world reaches the body on its sensory surfaces, and everything that is rooted "in the gaze and in the guts" (EAGLETON 1993, p.17).

The parts of the body that perform some movement and produce any sensation, that's what Baumgarten calls "aesthetic faculties" (§ 536). It is they that allow access to an empirical experience of the world (§ 556), and it is ultimately that they perceive 'identities', or even a single identity in the midst of other heterogeneous perceptions.

The twentieth century bears witness to a real revolution in Aesthetics and, therefore, a new conceptualization of art and aesthetics, and this is due in large part to Marcel Duchamp (1887-1968). At the Independents' Hall in New York in 1917, while other artists organized their art objects in order to expose them, he crossed the street, went to a building material store, and bought a urinal, like those used in men's toilets; turned it upside down, signed with the pseudonym R. Mutt³ and named "the work", "Fountain." As for R. Mutt, this appellation could be anyone, but especially the worker who would have that object in the production line of the factory where he worked, or could even be the observer present in the museum, imagining that if a urinal can be transformed into a work of art, then anything could.

With objects manufactured and brought to the museum under the patronage of the artist, the notion of *ready-made* appears, making it impossible to describe the artistic object hereafter on a merely aesthetic-metaphysical criterion, which would restrict its place only between beauty and ugliness. Duchamp definitely changed the trajectory of discernment regarding what was understood as art (NÚÑEZ, 2010).

For another artist, Joseph Beuys (1921-1986), however, the Duchampian "revolution" would not have been so revolutionary because, in his view, Duchamp would have, in the end, missed the opportunity to develop a theory based on the work done opting, instead, to maintain a profound silence:

I criticize him because, just when he could have developed a theory based on his work, he kept silence. I am the one who develops the theory that he could have developed. He made that object (the urinal) enter the museum and realized that its movement from one place to another turned it into art. He failed, however, for not getting to the clear and simple conclusion that every man is an artist (DE DUVE, 1998)

On the one hand, Duchamp's commitment to rejecting traditional and crystallized readings of a work of art, since any object taken from its everyday use can be elevated to the category of art, on the other, Beuys' complementary notion that "all man is an artist" indicate the fact that this generation of artists perceived the difficulty of obtaining a definitive and a single definition of both the aesthetics as a philosophical discipline and the meaning of what artistic object is,

² The noun was introduced in his book *Aesthetica* and defined as "the doctrine of sensitive knowledge." Before Baumgarten, the doctrine of art called something related to the production of an object, thus, poetic refers to the production of images. The beautiful, as it could not be included in a number of objects, was considered apart. See: ABBAGNANO, Nicola. São Paulo: Martins Fontes, 2000, entry: Aesthetics

³ Later, talking about what happened, revealed what the critics relied on to reject "the work": Some said that it was an immoral, vulgar thing. Other than that this was plagiarism since it was a bathroom piece. However, he replied, "Mr. Mutt's source is not immoral, this is absurd, just as a bathtub is not immoral (...). Whether Mr. Mutt manufactured the Source or not, that does not matter. It matters that he has CHOSEN it. He took an article from his everyday world, exposed it, so that its utilitarian meaning disappeared under the new title and point of view. He created a new way of thinking that object" (STILES, K., SELTZ P. Theories and documents of Contemporary Art: A sourcebook of artist's writings, 817)

contributed to a sense of aesthetics as an experience of the sensitive. That sense could illuminate an increasingly varied series of questions, particularly those related to human experience, such as the act of writing and being able to read for the first time the very name or the names of loved ones. It is in this sense that it is possible "to live aesthetically" an experience like this, an experience comparable to that of the artist who, after painting his painting, recognizes himself in it, exclaiming with satisfaction, "That is me."

The relation (or relations) between art / aesthetics and subject / identity is so narrow that one can not think of a separation between these statements without prejudice to the subject's own psychic structure in its relation to the world. This thesis, however, was not always the thesis of the traditional aesthetic represented by Kant or Hegel, for example. Philosophers in general of this generation have always had an understanding of art as external to man, or at best understood that art should possess the power of touching the senses, without thereby involving the entire sum and all psyche in that relationship. In Hegelian idealism art does not serve man only to give him pleasure, it is also an expression of a spiritual truth. For Kant, although art is defined in terms of an aesthetic experience, in opposition to Hegelian idealism, in his conception, this experience results only from two faculties of the mind coming either from reason or from sensibility.

An "incorporation" of art has been thought by contemporary philosophers, among them Maurice Merleau-Ponty. He represents phenomenology and its unique status in the philosophical understanding of human reality. Merleau-Ponty thinks of the body not only as one among so many objects located in the world, as Platonism in its dualistic perception of the human. The body, thanks to phenomenological thinkers, contributes, on a large scale, to the construction of the world, simply being a body without divisions or separations. In *The Visible and the Invisible*, Merleau-Ponty states that:

[...] When I find the present world as it is, under my hands, under my eyes, against my body, I find much more than an object: Being that my vision is part, a visibility older than my operations or acts. This, however, does not mean that there is fusion, coincidence, from me: on the contrary, this is done because a kind of dehiscence cleaves my body in two, and between it, watching and watched, it touching and being touched, there is overlapping, imbrication, so it must be said that things pass within us, just as we pass within things (2000, p. 121)

This comprehensive sense that Merleau-Ponty attributes to the human is made possible by overcoming the subject-object dichotomy, a movement also claimed in Modernity. However, it is in the context of contemporary art that the subjectivation of aesthetic issues occurs, so that the sensitive ceases to be a passive faculty to become a means by which the artist touches the world and all aspects of human and social life (LAGO, 2014, p.58). Aesthetic ceases to be mere apprehension of the beautiful captured by the look to be true engagement of all the affections in the experience with the world.

Homo-aestheticus: for a new understanding of human identity

The human sciences stand out by the constant search for explanations that account for a comprehensible understanding of the human phenomenon. For a long time, however, even the human sciences surrendered to a method of analytical and descriptive knowledge, such as Cartesian thought. The characteristic properties of the senses and appropriated by aesthetics, such as sound, smell, taste, color, were despised because they did not serve what was always defended to be "true" science. Aesthetics, in this sense, represents a change in this paradigm.

Art has reached its place in school curricula. However, because it compartmentalizes it in a specific discipline, this is tantamount to withdrawing, from the human, its ability to express itself artistically in the most varied daily experiences, so that the time devoted to art at school ends up looking like a waste of time.

It can be argued without a doubt that the understanding of the human being as *homo-aestheticus* is a primordial factor for the understanding of human identity, for the simple fact that art is as intrinsic to the human being as thought and language. It is this conviction that is behind a still young science, the *neuroaesthetics*, which proposes to study the neural processes underlying the aesthetic behavior. *Neuroaestheticians* argue that by seeing an object, the brain activates an "aesthetic function," which are the "psychological processes that are evoked in the creator or observer of the object in the course of interaction with it," according to the *neuroaestheticians* Martin Skov and Oshin Vartanian (2017, p.9).

The experience made possible by aesthetics not only refines the sensory system but also cultivates our imagination ability, and this happens from a very young age when, for example, the child converts a piece of wood into an airplane, a piece of sock filled with sand in doll or the lines of a drawing as father figure. According to Eisner (2002: 4), a culture of people whose imagination is impoverished will have a static future, little will change, for there will be little sense of possibility, since it is the imagination that drives us to try new things. Without imagination, we would have to test things empirically, without prediction, without being able to foresee the consequences.

It is worth noting here the studies that Paul Ricoeur started - although he did not give continuity, on the concept of *prospective identity*. In his seminars on ideology and utopia, he clarifies that:

The symbols that regulate our identity come not only from our present and past, but also from our expectations of the future. Opening to unforeseen events, to new encounters, is part of our identity. The "identity" of a community or an individual is also a prospective identity. Identity is on hold. Hence, the utopian element is a fundamental component. What we call "ourselves" is also what we expect and what we are not yet. If we talk to Geertz and others, it is the very case of the structure of identity as a symbolic structure: as Geertz points out, we can differentiate between "models of" and "models for". "Models of" look at what they are, but "models for" look toward what should be in accordance with the model. The model may reflect what it is, but it can also open the way to what it is not. This duality can be constitutive of the imagination itself. As I have suggested, it is reflected not only as ideology and as utopia, but also as art, as a framework and as fiction (2015, 422)

It is important to note in this quote some key questions related to what, for the author, means and what is composed of what he calls a prospective identity. First, it is not just the identity of an individual, but also the identity of an entire community, and this fact enables "unforeseen", "new encounters", because it is a reality that is always "in suspense", as which is constantly open to new possibilities, hence the emphasis he gives to the utopian element. He then says that when the subject refers to himself as the "self," he reveals the symbolic structure of his identity, he is a self that looks in the direction of a model, but not a model which reflects only a present (model of), but a model that points to a future (model for). This prospective identity is made possible by the imagination built not only by ideology or utopia, but also by art.

For Ricoeur, all human action is symbolically mediated, and with this he denies the existence of a pre-symbolic stage (TAYLOR, 2013, p. 129), and in denying it, proposes that, precisely because human identity is immersed in the symbolic it can be utopian, that is, it can open up to many possibilities, to create new models and even to overcome old models. This can be clearly seen when offering a blank sheet and colored pencils for a poor, hardworking and illiterate person, asking him to draw a house. In general, he does not draw the design of his present house or a house related to some distant past, but always produces a prospective house, which exists in the imagination, in the utopian desire to build a perfect place, cherished by dreams.

The daily struggle for work and living wage can even shuffle the prospective vision, the expectation for the future, but cannot kill, silence or maim them. "To weariness," as Walter Benjamin (127) affirms, "the dream is followed, and it is not uncommon for the dream to compensate for the sadness and discouragement of the day, realizing the existence entirely simple and absolutely great that can not be realized during the day, for lack of strength. "

The disfigurement of the aesthetic subject

There were times when the literate world made no effort to stop the dispossessed masses from learning to read. Today, on the contrary, in a post-industrial context, illiteracy is a sign of backwardness that no society intends to perpetuate, after all, the literate man produces more and better, although, as Horkheimer (2015, p. 99) pointed out, the working masses totally excluded from economic power serve only as a means, not as an end. It does not matter to this economic power that these masses, through their capacity to read and write, get to the point of being able to read their own history, full of domination. It does not concern creativity, but subjection, which is done through the exaltation of some "virtues", such as devotion and renunciation, obedience and denial of one's own interests (Horkheimer, 2015, p. 99). Creativity and art are only possible with an autonomous individuality, and this is the one that the worker cannot own, since he has to adapt to the demands of capital. Without art, the individual suffers, but his suffering is converted into a good for the functioning of the prevailing order. Domination disfigures when designing an adjustment of bodies (Butler).

To disfigure the aesthetic subject is basically not to recognize in someone his creative power or to disregard his potential for otherness arising from his capacity to create, it is to recognize in the other only his corporeality, despising his spirituality, his work force, without imagination, without creativity, stealing the pleasure of life. This is evident in the employee-employer relationship. "My boss," said one of the interviewees, "volunteered to enroll me in a school nearby, where I could learn to read and write, but how, if he gives me so much clothes to iron that I do not have time to go the school? ". To rob the subject of his creativity is to steal his time, this time spent "in honest work" and poorly paid, until it reaches the point where this subject is convinced that the denial of self to the other who exploits is something good. An ideologically forged good.

The saturation of life by work contributes to the obliteration of the subject. Although his world is surrounded by images and objects, none of them, however, carries his signature, and therefore his purpose is none other than to

"erase the border between illusion and reality, between art and everyday life" (LASCH 1986, 128).

The aesthetic man is killed when a necessary mediation between the outer world and the inner world ceases to exist, when work takes the place of dream and fantasy. Laura⁴ was born in the countryside in the state of Paraná, Brazil. At age eight, and being the eldest of nine siblings, her father put her to "pull wild animal in the plow" along with her brother a little younger than her. She never went to school, which was very far from where she lived, since she was the one chosen to help her father in the work of the field; had a great urge to go, especially when she saw her other brothers getting ready to go to school, but her father never let her go. So, "we both got dumb," she says. She is not unhappy when she recalled that when she saw the brothers, all of them clean, neat and well-dressed, going to school, then she looked at herself in clothes that looked more like rags, disheveled and muddy.

Laura has always lived in a world previously built for her, without her participation, and her current work as a maid, cook, and cleaning lady perpetuates such a situation. She has managed to retire, but continues working, because the gains from retirement barely account for the most basic expenses, such as food. Laura realizes that the objects she deals with every day, like cooking utensils and cleaning supplies, do not tell her anything and are only part of a world she dominates, a kind of "second nature" (Lasch 1986, 179), which does not include the character of the man-made object, or, as in the words of Edgar Morin (2016: 124):

[...] the object exists in a positive way, without the observer / conceptualizer participating in its construction through the structures of his understanding and the categories of his culture The object is then a closed and distinct entity that defines itself in its existence, its characteristics and properties, as if it were independent of its environment. Thus, the objectivity of the universe of objects is maintained through dual independence in relation to the human observer and the natural environment.

Aesthetics proposes a task to existence, which is to integrate human existence, to gather their fantasies, their imagination, their dreams, into the same reality. For Gadamer (2018, p. 150), this reality is made possible by art; it is it that reconciles experience with historical consciousness. Lending the term Hegel's worldview, Gadamer further asserts that aesthetics favors multiplicity, and at the same time, the possibility of a change in worldviews. He goes on to say, "The experience of art must not be falsified", explaining this statement, he says that "what matters to us is to see the experience of art in such a way as to be understood as experience" (2018, p. 151).

One can again return to Duchamp. The artist, having crossed the street and acquired an object, placed it on display, not only intended, with this act, to protest with a type of art as something surrounded by an aura of sacredness, far from the eyes of poor mortals who they would never have access to it, at the same time that it wanted to raise an ordinary object to the same auric level of the work of art recognized as such by the specialists. The fact is that Duchamp wanted, with this "sacrilegious act", to bring together the common experience, the repetitive and extremely tedious work, of a true aesthetic experience since, according to Gadamer (2018, 151), "every encounter with the language of art is an encounter with an unfinished event, being itself a part of this event. "

Conclusion: Understanding human identity from art

"Man should not be present," Cézanne would say of his paintings, where scenes of life dissolved into a mosaic of colors. The same can be said of the situation of the human in capitalist society, which submit man and impersonate him, making him only an object that relates to so many objects that exist to be consumed or discarded. Marx already pointed out in his critical history of the theory of surplus value that the exploitative substance of material production under capitalism is "hostile to certain artistic productions such as art and poetry" (*apud* Vazquez, 1968, p. 171).

Marx, however, did not count on the treacherous subtlety of new-age capitalism, which uses aesthetics to simulate the truth made possible by aesthetics, producing what Lipovetsky (2015, p.65) calls aesthetic hybridization, which "remodels the same time the sphere of leisures, of culture and of the own art ", which means a displacement of the capitalism of production towards a capitalism of cultural type. The priority, according to the author, [...] that is not only a return to the material manufacture of products but also for the creation of images, spectacles, leisure, commercial itineraries that allow for distraction and exciting experiences [...] the experience market appears as the new frontier of capitalism, the fourth economic age succeeding those of raw materials, products and services. Thus, our world presents itself as a vast theater, a hyper-real scenario designed to amuse consumers. Today, it is the styles, the spectacles, the games, and the fictions that become the number one commodity; everywhere the "creatives" impose themselves as new creators of value and developers of markets (p.65).

⁴ Interview on September 6, 2018 (name is fictitious)

The experience that the new capitalism provides is not that which mobilizes utopia, the possibility of metamorphosis, of an increase of consciousness, but that which comes from the integrated contact with consumption. No wonder, when people are asked what they would like most to do after they learn to read and write, they respond that they would like to be able to send and reply to messages on their smartphones. The industry knows very well how to integrate communication with pleasure and provide endless experiences of the enjoyment of the human with himself, in a constant go from himself to return to him again, as in the selves taken by the same smartphones.

In general, literacy learners are more likely to read than to write, not least because they are bombarded all the time by a huge volume of written messages, often devoid of meaning. On the other hand, writing requires another type of skill; the literate is invited to create, "drawing" words and to perfect his new ability. Writing, more than reading, requires more creativity, so perhaps the illiterate people feel more difficult in this aspect. They often feel ashamed of their own words, show themselves to be more timid and insecure, with the feeling that they are not capable, of not being able to, symptoms peculiar to those who have denied the right to express their own creativity.

One cannot say that there is really an "I" in literacy when this adult just copies the models previously established by others. Traditional techniques that teach writing through copying or writing over dotted letters do not work for him simply because such methods do not tell anything to him. Only art, as creation, is capable of releasing such a repressed spirit. Therefore, in order to learn how to handle the difficult task of holding the pencil and placing it in the service of its creation, it is preferable to draw and color, a process that helps "to soften" the hand, as they are usually referred to this exercise (their hands are hard due to also hard jobs). The artistic expression always opens new possibilities, it allows to loose the ties and to give flow to the creation, besides to describe feelings and emotions. Unlike children, adults find it more difficult to release themselves, both physically and emotionally, which requires that the instructor maneuvers others that differ from those given to the instruction of children. Aristotle, already considering these differences, said that tutors teach children, while playwrights teach adults (MCLEISH, 1998, p.10), in the sense that activities for the latter should always involve pleasure, not unthinking pleasure, but one which predisposes to emotional and intellectual engagement at the same time, and whose engagement is capable of altering and affecting the one who is the producer of such artistic activities (Ibid., p.10).

Elaborating a project that considers the aesthetics for adult literacy is to take into account the need for autonomy of this subject. The artistic capacity evoked in the act of writing and reading is awakened when, through art, one proposes access his inner voice. This notion of inner voice or impulse was intuited from the rebellion of the nineteenth-century Romantics against neoclassical norms especially in literature, based on rationalism, tradition, and formal harmony. These romantic poets followed Rousseau, for whom the institutions destined for education, take from the man his freedom of expression and suffocate his inner voice making him see things from the outside, as mere observers of the order, and not from himself (Taylor, 1989: 370).

This same concept was already present between Greek culture in the distinction of doing as *poiesis* and doing as *techné*. What these two have in common is *aletheyein*, unveiling, truth. On the other hand, what differentiates these terms is that the first (*poiesis*) produces what it has in itself (*en haytō*), whereas what is produced by technique has origin and development in the other (*in allo*) (GALIMBERT, 2006, p. 384), and in this case, autonomy gives way to alienation.

In this context, it can no longer be said that one can teach the other, it would be more logical to say that one awakens in the other a certain action, be it technical or poetic, it does not matter. What matters is that by constructing the world the subject constructs himself, and that is what basically consists of the pleasure of action, that is, in that the subject is not simply a contemplative spectator of the meanings that others give to the world, but that he, taking possession of his autonomy, provides his own meanings.

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PROFESSIONAL EDUCATION AS A TOOL TO WOMEN'S SOCIAL CHANGE: SENAC SANTOS AND CITY OF GUARUJÁ'S PROJECT

ALENIE FENANDA CORREIA MELO BRENTGANI

ABSTRACT

Throughout 2018 Senac Santos, hired by Guarujá City Hall, provided professional training courses and lectures on social awareness on communities of the city. More than one hundred classes were taken to the needy neighborhoods of the municipality of Guarujá.

As a result of these actions with the community, there was a great social transformation, especially on women.

Trained in vocational courses aimed at the rapid insertion in the labor market, these women were able, in a short time, to re-enter the labor market; which brought them financial autonomy, improved self-esteem and appreciation of their role in the family and in the world. Through interviews with some students, it is possible to perceive that education is a great means of social change for women with low schooling and low income. *Social change, social project, professional education, female self-esteem, female autonomy.*

DEVELOPING A CULTURE OF INNOVATION: THIRTY YEARS FOSTERING RESEARCH AMONG K-12 STUDENTS IN MEXICO

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ABSTRACT:

In a constant changing world, traditional education is rapidly losing its effectiveness, diluting students' motivation to learn and excel. For this reason, creative alternatives must be explored. Developing research projects originating from the interests expressed by the students, ranging from science to humanities and presenting them in an academic congress, has tapped curiosity, improved learning and created a research culture among K-12 students from different parts of Mexico. In this congress, the papers by the students are evaluated by professional scientists and experts, in poster sessions. This exercise has represented a valuable experience for the students, improving their learning process through reinforcing analytical and abstraction skills, as well as question formulation, designing creative ways to address such questions according to their objectives. Developing skills by hands-on processes in different subjects, has generated enthusiasm in students, teachers and schools and has resulted in an increased participation year after year. Moreover, the effect of this academic student congress has also influenced scientists from different research institutions, fostering a strong commitment and a spirit of collaboration between the scientific community and the young talents. This Congress has proved to be a valuable device towards consistently improving 21st-century skills, such as critical thinking, creativity, communication and collaboration, better preparing students for life, specifically in the face of professional challenges towards the structural transformation of our country.

Keywords: Innovation, effective learning, motivation, research, K-12, science, critical thinking, creativity, collaboration, communication.

Introduction:

In order to contribute to the construction of a developed country that generates knowledge, science and technology, a culture of innovation and research must be embedded in K-12 schools. Thirty years ago, our institution, Centro Universitario Anglo Mexicano (CUAM HS), committed to promote critical thinking and fostering research as learning strategies in our academic community, by establishing a student congress as a space for discussion (1). This event has resulted in an academic forum for debate and analysis among students, who present their research projects under different subjects to external evaluators. This Congress has been recognized by the National Academy of Sciences (Academia Mexicana de Ciencias; AMC), as an effective device to promote and identify young talents. The Congress has even been nominated for the Innovators of America International Award.

This project, conceived by CUAM in the city of Cuernavaca, Mexico, has networked with the State Academy of Sciences (Academia de Ciencias de Morelos; ACMor) and convened jointly with our school, since 2013. Strategic alliances were also established with the AMC, the Consejo Nacional de Ciencia y Tecnología (CONACyT), the Movimiento Internacional para el Recreo Científico y Técnico (MILSET) and seven national research institutes, in order to stimulate the collaboration of top scientists and experts with potential talents from different schools. Over the years, some of the outstanding experts have participated as keynote speakers or in topic panel discussions. Furthermore, some of them have also tutored several projects presented in the congress.

The main actors are students, ranging from fourth to twelfth grade, participating by grade level, in the areas of prototypes, mathematics and physical sciences, biological, biomedical and chemical sciences, environmental education, social sciences, humanities and arts, as well as business and economic sciences.

This learning process culminates with the project presentations by the students and their discussion with experts, who give them valuable feedback.

For the teachers, it is highly motivating to detect an increased interest from their students, not only because they research diverse topics of their own interest, but because they frequently integrate multidisciplinary knowledge and strategies, which also leads to simultaneous improvement of their skills year by year. All these efforts are directed towards a systematic training for processing and discriminating information that drives them to higher order thinking skills with efficient decision-making mastery.

Preparing new generations with greater appreciation for innovative ways of thinking through a holistic education, will enable them to be successful universal citizens (2). In the end, a developing country such as Mexico requires constant strengthening of science, technology and humanities, in order to fortify its competitiveness as an emerging power, with the potential of being one of the top ten economies in 2050 (3), enabling our younger generations to better adapt to a continuously changing labor market (4).

Body of paper:

The statistical analysis of the projects presented in the research congress at different school levels, reveals an increased interest of students for participation after the integration of different academic and scientific institutions into the event. This, in conjunction with the integration of the different school levels are shown in the chart below.

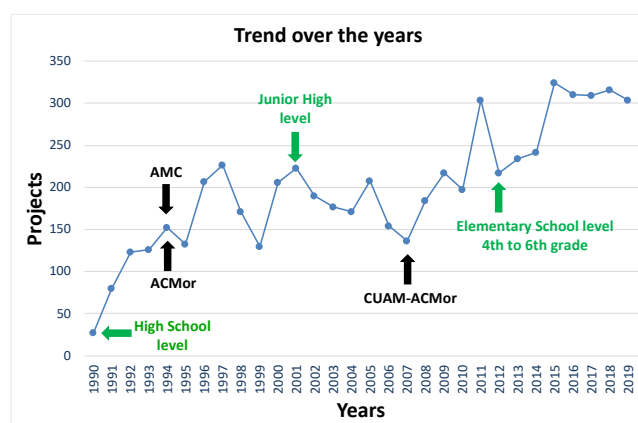


Figure 1. Projects trend over thirty years.

The student participation pattern over 30 years behaves in a similar fashion.

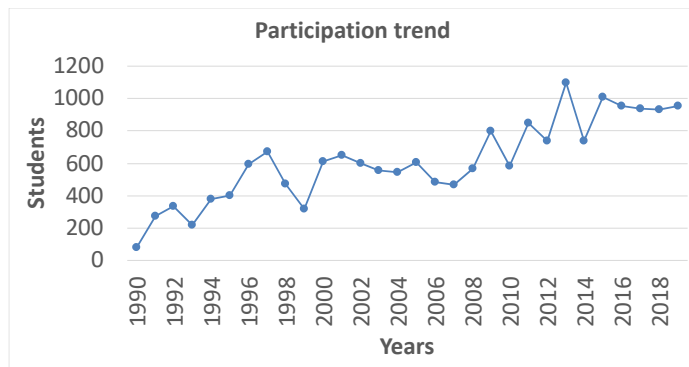


Figure 2. Student participation trend over thirty years.

A similar trend was achieved in the number of participating schools, which has increased from 2 in 1989 to 36 in 2009 and 48 in 2019. It is particularly relevant that this initiative has influenced public and private schools from completely different backgrounds, enriching the diversity of participants, 62% private and 38% public schools, magnifying the effect in different populations and diverse regions.

Participation and interaction of top scientists with students started at the second year, and has increased from 12 in 1990, to 48 in 2009 and 97 in 2019. Such collaborative interaction opened a window of opportunity even for low-income students and rural communities. As shown in Figures 3 and 4.



Figure 3. Presenting and evaluating the projects.



Figure 4. Students and scientists attending to the Congress.

The congress consists of five-minute oral poster presentations followed by five minutes of questions from the evaluators and discussion. The students are expected to summarize their findings and proposals while presenting their final conclusions. Three scientists or experts are assigned to ten projects per room. What is most valued is the originality and approach of the students to the topic, the depth of the questions that triggered their research and the appropriate use of the scientific method or other systematic methodologies. Most projects are performed at the school or at home; a minority are done in specialized laboratories mentored by scientists.

Some of the winning project titles in 2019 were:

- Quantic chryptography.
- Effect of fluoxetine on the behavior of *beta* male fish.
- Effect of *Trichoderma* on the control of *Fusarium* fungi on sorghum.
- Feminicides, the data speaks, but what do we do?
- Imperiplum, an alternative for reducing global warming.
- The chemistry of Toltecs.
- Why not in Zapotec
- Talking, an app with facial recognition for hearing impaired persons.

In the past some of the winning projects have been invited to participate in similar events at the international level. All the information about the Congress can be found in Spanish at www.cuam.edu.mx, and www.acmor.org.mx. The goal of developing a national culture of innovation among youngsters, established at CUAM thirty years ago, has been strengthened by the regional replication of this model through annual CUAM Research Encounters in other three cities: Cancún, thirteen years ago, Mexico City, eleven years ago, and Mérida, this year. Even the National University of Mexico (UNAM), inspired by this event has replicated it successfully.

During 2019 this learning methodology influenced eighty schools and more than 1,700 students that presented 593 research projects. These add up to almost 20,000 students who have presented projects in 30 years, planting a seed for the emergence of a national culture of innovation.

One of the main benefits of promoting student participation in these types of events is to regain the interest, curiosity and motivation for permanent learning, integrating diverse subjects into a common goal that is relevant for tackling practical problems, making sense of an overcrowded curriculum that usually appears to be a set of disconnected facts. These kinds of strategies bring a wider perspective that even contributes to exploring alternative professional fields, boost confidence as well as passion for science and other complex subjects, usually considered difficult to learn. In this way knowledge is achieved as a progression towards understanding key ideas (5).

Conclusions:

Today Mexico is the fifteenth world economy, sixth world car producer, and one of the top three trade partners, along with China and Canada, to the United States, with a commercial exchange of over \$1.6 billion USD per day, of which 88% of all exports are manufactured goods and only 3.5% are natural goods. In contrast, our country has over 120 million inhabitants, where more than 50% live in poverty and the richest earn more than twenty-one times what the poorest earn. Of all Mexicans, 30% of the richest households control 63.3% of all income, while 30% of the lowest income families participate with only 9% of the total revenue (6). To overcome this dramatic contrast, a new generation of more creative and better skilled Mexicans must be developed through a highly effective and passionate education with focus on innovation, research, science and technology that opens more opportunities for social mobility and quality of life in order to become a developed country.

Thirty years of fostering this congress has developed a research culture among diverse students from more than 250 schools of different states of Mexico, representing 56% of the national territory. This opportunity has brought about a challenging and valuable intellectual experience for young students and teachers, that includes the ability to synthesize their findings and relevant information, as well as opening their minds to accept criticism as a form of learning while enjoying the experience. Another contribution has been the increased sensitivity of the scientists and experts towards the education of the very young.

Definitely, the most important effort must be the improvement of the teachers' research capabilities, to motivate and guide young students into an exploratory process of knowledge that allows them to discriminate information,

eliminating fake news and distinguishing facts and science based-evidences from what are not with the support from scientists and research institutes. These actions will also contribute to develop the urgent need of a better informed and critical society.

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ASSESSMENT OF THE TEAM-BASED LEARNING METHOD AMONG WORKING AND NON-WORKING NURSING ASSISTANT STUDENTS

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Objective: to evaluate the use of the active learning method team-based learning (TBL) among working and non-working nursing assistant students.

Method: This was a quantitative study including 149 nursing assistant students from morning and afternoon periods of the technical school at Albert Einstein Teaching Institute, São Paulo, Brazil. We used two forms for data collection. The first form was used to collect students' sociodemographic features and their attitude towards previous preparation tasks for TBL session, and the second form was used as a survey to understand students' perception about the TBL method. The non-parametrical Mann-Whitney test was adopted to compare perception in different dimensions and final grade given by student to the TBL approach. The Spearman's coefficient test was used to assess relationship between perception or performance grading, and amount of hours needed for preparation tasks. **Results:** No differences were found in the performance of working and non-working students. In addition, no associations were observed between hours dedicated to work and students' performance. No statistically significant association was seen regarding assessment about the methodology among working and non-working students', besides, no statistically significant association was observed about students' perception of the TBL method among those who had a paid and an unpaid activity. **Conclusion:** Findings of our study encourage the application of TBL method for working and non-working students. To adopt TBL method, even for working students, does not seem to be an obstacle especially in terms of methodologies that require previous reading tasks.

Keywords: Education; Nursing; Team-Based Learning; Active learning methodologies.

MATERIAL PRODUCTION: PRINCIPLES FOR DESIGNING EFFECTIVE ESL MATERIA

ANFAL AL WAHAIBI

ABSTRACT

Teaching resources and materials form a crucial part of teaching. Despite the massive rich English language teaching material, there is a continuous need from teachers to find, adopt and select materials for their classroom's use. Finding reading and listening materials could be seen as an easy task with the new global rich media; writing teaching materials, however is not! Teachers spend considerable time transforming the available material into effective teaching materials. In this presentation, the ESL teachers will be introduced to a few principals that will help them in designing their own teaching materials. The presentation aims to present the planning process and several guidance of how to design and transform the available materials to effective ESL teaching materials.

DICTATION IN THE ARABIC LANGUAGE: BETWEEN TESTING AND COMPETING

BASSAM BARRAK

ABSTRACT

In the scope and under the name of “Bilarabiya for Languages and Modernization”, we hereafter exhibit in this conference, a presentation about the dictation in the Arabic Language and related exams or even competitions. The latter aims at including the majority of the society classes, departments and institutions. It has become since 2012 till present a milestone in the employment of language; which the media namely "LBC International" channel and websites covered on the occasion of the Arabic language International Day declared by UNESCO at the United Nations seven years ago .

The dictation workshops in Lebanon formed a bridge in people’s memories that dug out words in form and meaning to reconcile with words that were difficult to write. Therefore they corrected their mistakes. Many believed in the necessity of the workshop namely the League of Arab States, the Council of the International Conference on Arabic Language, Social Way Association, Antonine University Publications, Bilarabiya for languages and Modernization, UNESCO, and the ESCWA which all cooperated, not to forget the ongoing sponsorship of the Ministers of Education, Culture, Information and Justice, the Speaker of the Lebanese Parliament and the Commander of the Army.

The dictated texts were the subject of competitions entered by more than 2000 person till date; every year a committee of "Secondary Arabic Language Teachers Union" corrects the papers officially registered in the Ministry of Culture. The top 10 results are announced, rewards and Distinction Certificates are distributed in addition to monetary prizes for the top 3. Noting that the mistakes’ level is decreasing year after year after attention was displayed by viewers and contestants in terms of spelling and thinking of words’ meaning, phrase structure, reliance on rules, previous text assimilation and benefits of its rules. Starting from 20 mistakes for the top places, we arrived to relatively only 5 mistakes.

Guests that are public figures in the fields of media, culture, politics, and military participated in the written competition. Among contestants were army brigadiers, students of the military school, school and university students, and even teachers of Arabic Language. Participation also reached lawyers that underwent the tests from their order, deputies from their parliament, not to forget embassy representatives from the ESCWA, and viewers from home who challenged one another every year, stimulated by the media campaigns and text subjects.

The difficulty I faced was the use of dictation in a specific context, for a specific purpose, For example, in the parliament, I chose the elected presidents subject and chose for each an attribute in a sentence in hard contextual coherence, same way I used the text titled “The Army of My Country” in relation to the army commanders since the independence, and that was also applied in relation to justice and injustice in Lebanon, when I addressed lawyers and their order, the martyrs-journalists from occupation till liberation when I addressed the journalists, the Lebanese writers in Lebanon and the diaspora in the American continents when I addressed the Arabic Language teachers and university students, also the Ghassan Tueini United Nations Ambassador Speech “Let my people live” , which text inspired me to address the ESCWA, and add the rules and linguistic traps.

I have also tried hard like “Bernard Pivot” in France to insert words of musical effects, rhyme and anagram, not to forget meaning ambiguities between 2 notions, structure methods, and spelling of vowels, short and long.

This dictation group has become a long awaited annual event, calling for anxiousness to know the new text, words, and difficulty amid the challenge of the participants in a environment full of class and excitement, noting that some schools and some regions began to adopt the idea and implement it on a local and private level, signalling the success of the project.

Today, “Bilarabiya for Languages and Modernization”, is a comprehensive team in the language training field and the celebration of the annual or semestrial dictation event, amid the demand for a monthly session. This year, we aim for a subject revolving around the legend, singer Fayrouz, for her 60 years of professional singing is worth being adapted into a dictated text, where the whole nation becomes a participant, whether orders and syndicates for artists, media-people or intellectuals.

We will also be issuing the third dictation booklet including 12 texts with rules’ and meaning explanations to be

distributed to the guests and bookstores. It will be surely hard to translate into English since the form, notion, and rules are not similar, stressing on the fact that each language has its spelling aspects and form, however the meanings always meet like we did today with no need for a country to serve education, languages and curriculums. We hope that we have shed enough light on our subject, please view some videos and ads related to our dictation sessions.

DISTANCE LEARNING: THE EXPERIENCE OF A NATIONAL MASTER'S DEGREE COURSE (PROFSAÚDE)

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ABSTRACT

This paper describes the experience of a national master's degree distance course in Health, its main strategies to implement the proposal and the grounds for its achievement. It is the first offer of an ODL (Online Distance Learning) course in Collective Health for all regions in Brazil, and it has become a large-scale health professional training program.

Keywords: Distance Learning, Professional Qualification, Health

Introduction

It is a national Professional Master's degree distance course led by the Osvaldo Cruz Foundation (Fiocruz) and presented by the Brazilian Association of Collective Health (ABRASCO) in Family Health (PROFSAÚDE).

Distance Learning today has been largely spread in undergraduate courses as well as graduate courses in Brazil. When it comes to a country of our size, the need for large-scale training makes ODL a strategy to be considered. PROFSAÚDE was created to meet the need to train health professionals, preparing them to act as professors in Health-related graduate and undergraduate courses and as preceptors in the ESF (Family Health Strategy) and in multi-professional and medical residencies.

PROFSAÚDE is an innovative proposal in the *stricto sensu* graduate course in collective health, forming a large distance teaching-learning network through several higher education institutions throughout the country.

Implementing a proposal for a distance and online course requires some pillars for its construction, which goes from the pedagogical concept to the shared management between institutions.

Experience Of The Course

Distance Learning as a health-related teaching method has become a fundamental strategy for the qualification of professionals in Brazil.

Along with the need to train a large contingent of workers in the most distant corners of the country. ODL is a teaching method provided for by the Education Guidelines and Bases Law (LDB 9394/1996) ¹.

PROFSAÚDE was created in this scenario and integrates this method as the first distance learning experience in Collective Health for *stricto sensu* graduate degree in the professional master's degree. It aims to train students from all regions of the country, thus developing a great collaborative network comprising 21 higher education institutions.

In order to develop and create the course, it was paramount to break with traditional educational processes and pedagogical concepts and to substantiate the course on critical pedagogical concepts, where students take an active role in the construction of knowledge. Considering the students as the subjects of learning, respecting their autonomy and welcoming the important set of knowledge and experience that they bring from their past is paramount for professional qualification processes.

PROFSAÚDE built its pedagogical project in accordance with the pedagogical concept focused on the subject of learning, on the development of skills and the consequent appreciation of the experience, so that meaningful learning takes place².

It is also worth mentioning the significance of maintaining a relationship with their professional environment in a proposal for a professional master's degree, and previous experience contributes to the construction of knowledge, thus promoting a meaningful learning.

As an ODL course, all subjects were organized in online educational materials based on this pedagogical concept. ODL activities were developed in the Virtual Learning Environment (AVA) - Open Source Moodle (Modular Object-Oriented Distance Learning), for being a free collaborative learning environment software, thus enabling shared educational actions through use of technology, where all the subjects involved can act simultaneously. This software may be used in any operating system, besides having the advantages of adaptability and usability².

Organizing in a national network leads to the need to form a governance capable of facilitating the implementation process and a homogeneous implementation throughout the national territory, not neglecting the particularities of institutions, as well as of the regions of the country. For this to happen, it was necessary to create a shared management collegiate space.

This space is an instance of articulation between the institutions comprising the network from the political point of view, establishing a relationship with the national instances, supporters and applicants for the course, and from the pedagogical point of view, establishing a relationship with the national academic coordination³.

In addition, the collegiate is a space of exchange of mainly pedagogic, but also administrative experiences. We believe that this format has allowed a democratic and inclusive management.

All universities have a local coordinator, professors and advisers, and are supported by the distance learning centers³.

The distance learning professor's training was also considered a great concern, firstly because some of the professors were not familiar with the method as well as the environment. Also, because we understand that the professor of an

ODC course is a key factor for the success of the course, being the mediator and advisor of the activities of a given subject and following up the development of each student and class. Thus, a training proposal was established, from the use of the virtual environment and its tools, to the pedagogical proposal and content of the online material.

PROFSAUDE also created a permanent education space in the virtual environment to exchange information on the material prepared with the national responsible for the subjects.

Half-yearly assessments were important for us to have feedback about the course. Thus, we organized an instrument where the students could express their opinion on the theoretical and methodological performance of each module, with the following assessment items: achieved goals and expectations, methodology as a facilitator of learning, adequate educational strategies, themes, modules and professional relevance, weaknesses and strengths. Likewise, each university actively listened to its teachers at the end of each semester. This process helped us make the necessary adjustments to the course and reorganize the online material.

The master's course planned some face-to-face meetings focused on the first semesters. These were strategies of connection, interactivity and integration space of the aspects addressed online, carried out by the professors and advisors of the students. It was paramount to include these face-to-face meetings as part of this teaching method, even if they represent less than 20% of the course class-hours.

The teaching network now has 21 higher education institutions, 150 professors, 90% of whom have a Doctor's degree, 180 students in the final stage of defending their thesis, and 200 students are beginning their training.

Conclusion

Implementing a ODL course in the *stricto sensu* graduate course in collective health is an innovation, and we may highlight that, for a professional master's degree, it benefits the access to knowledge and the exchange of experiences among professionals from different locations, as well as enabling educational actions to be carried out in the professional environment.

Another important aspect is the possibility of breaking the geographical barriers in addition to allowing health professionals to study without compromising their professional activities.

There were around 1,500 students enrolled in the two editions of the class, which showed that the demand for an ODL course with our particularities is high.

Another advantage was to reach remote areas of our country, mainly in the northern region of Brazil, thus enabling the qualification of professionals.

The pedagogical concept adopted was also significant to break with the traditional models of learning and to provide ODL with a concept that integrates the active methodologies of learning.

However, there are still challenges to be overcome. Two of them will be highlighted, as follows. The first relates to student dropout, which we consider to be an important indicator to be followed in the ODL. We had a 25% dropout rate, for various reasons, from illness, failure and abandonment. Our current goal is to follow-up and seek strategies to decrease such rate.

Another challenge is lack of familiarity with the pedagogical concept, since professionals have been used to a "banking" concept of education with the transmission of static knowledge, focused on the professor as narrator of reality. Breaking this logic is to extend the scope of knowledge construction to something dynamic toward social construction⁴.

We believe that choosing the ODL teaching method for a master's degree course is to advance the process of democratization and providing greater access to professional qualification, as well as the possibility of changing teaching and learning.

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2019 WEI INTERNATIONAL ACADEMIC CONFERENCE ON EDUCATION, TEACHING AND LEARNING AT THE HARVARD FACULTY CLUB

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ABSTRACT

Statement of the Problem

Since the passage of Brown v Board of Education, the U.S. public education system has pursued a variety of strategies for achieving equal educational opportunity and equity for its citizens who are poor, African American, differently-abled, or from diverse linguistic backgrounds. African Americans have been the special focus of the federal compensatory education program designed to correct the ills of legalized segregation and Jim Crow laws that locked African Americans out of access to sufficiently funded and integrated public K-12 schools.

The U.S. continues to struggle with its commitment to educate African American citizens. In fact, one of the most daunting challenges that America faces is improving the academic achievement of African American students. A number of factors are said to contribute to the dilemma, including savage inequalities (Kozol, 1992), the systematic dismantling of public education (Saltman, 2005), high-stakes testing (Hursh, 2008), the decimation of the Black teacher and school leader workforce (Akua and Fenwick, 2016), corporate-backed charter schools replacing urban public schools thus reducing public school funding and equal access to high quality schools (Buras, 2011), and joblessness in the Black community (Wilson, 1996). The reasons underlying African American students' academic challenges are usually cited as a series of problems, rather than one problem alone.

One additional and frequently cited problem is that public school curricula are not culturally affirming or truthful for African Americans. African American students, like all other groups of students, are thought to be less engaged in their schooling when their cultural heritage is misrepresented, diminished and not properly recognized (King & Swartz, 2014). A body of educational researchers and practitioners has determined that culture is the key—the critical mediating factor for increasing academic achievement among African American students (Akua, 2012; Hilliard, 2003a; Hilliard, Payton-Stewart, & Williams, 1990; Hilliard & Sizemore, 1984; Ladson-Billings, 1994; King, 2005). The infusion of heritage knowledge (King & Swartz, 2016) is believed to be a missing link in the academic achievement of African American students.

Keywords: Education policy, K-12 curriculum policy, Black student achievement

Purpose of the Study and Research Questions

The purpose of this ethnographic study is to provide a case study analysis (and “thick description”) of the national and state contexts that shaped the formulation and passage into law of Florida Statute 1003.42 (h), the African American History legislation . Florida is one of only four states that has passed such legislation in an attempt to provide all students a more comprehensive perspective about the history and cultural contributions of African Americans and to spur academic achievement among African American students.

Generally, the life of a policy can be understood as occurring in four phases: (1) formulation; (2) legislation; (3) implementation; and (4) impact (Heck, 2004). This ethnographic study focuses on the first two phases (formulation and legislation) by analyzing and describing these phases specifically as they relate to Florida Statute 1003.42(h), a C. Akua, 2019 Page 2 of 3

K-12 curricular and instructional policy that mandates the teaching of African American history in Florida’s public K-12 schools. The study seeks to answer the following research questions: How did this legislation come into being? Who was responsible for organizing and mobilizing the forces that brought the legislation into being? What was the legislation expected to change with regard to culture and education? The study concludes with a series of recommendations designed for state legislators, district superintendents and school principals as they work to serve increasingly diverse public school student populations.

The study is broadly relevant to academics who study policy formulation and implementation.

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THEME-BASED WRITING INSTRUCTION FOR UNIVERSITY STUDENTS IN THE MIDDLE EAST NORTH AFRICA REGION

GREGORY VANDERPYL

ABSTRACT

First Year Composition (FYC) is an introductory core curriculum writing course that focuses on improving students' abilities to write in a university setting. Learning outcomes consist of, but are not limited to, applying rhetorical knowledge and academic writing conventions; developing critical thinking, reading and composing strategies; and employing writing processes. Assignments traditionally include versions of summary, analysis, and argument. Generally, students choose their own topics for each assignment. The author of this paper perceives this choice, which is often random, as an unnecessary cause of disconnect in the learning sequence; a missed opportunity for scaffolding and learner evolution. In efforts to establish consistency in an Introduction to Academic Writing course at a university in the United Arab Emirates, a theme-based instructional (TBI) approach was implemented. This paper chronicles its inception, design, development, scope and sequence. Impact analyses focus on final draft assessments, student survey results and end-of-semester reflective writing comments of 120 students over a period of two semesters. Based on the instructor's observations and the evidence collected, this paper promotes the theme-based instructional model as being a major contributing factor to enhanced interest and confidence in writing ability, self-realized improvement of writing skills and ultimately, increased levels of achievement as indicated by higher scores on rubric criteria for content and style.

Keywords: academic writing, first-year composition, theme-based instruction.

TRANSFORMATION OF PBL THROUGH THE CHANGE IN HIGHER EDUCATION IN THE 21ST CENTURY: A MODEL FOR AN INSTITUTION-LEVEL PBL DESIGN

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ABSTRACT

Through the educational transformation at universities driven by the radical changes in society, culture, politics, economy, technology and industry, and the knowledge, skills and competences demanded from the individuals in professional life, PBL has gained importance once again. The purpose of this descriptive study is to analyze the transformation of PBL from a teaching method to an educational philosophy through the change in higher education in the 21st century and to propose a model for an institution-level PBL design. The model is based on learner and problem-centered curriculum design, and it is organized according to an interdisciplinary and transdisciplinary approach. This model will contribute to the practitioners who would like to transform their institutions and design their curriculum according to PBL principles and to the researchers that will conduct studies about how to develop a curriculum through PBL.

Keywords: Problem-based learning, project-based learning, PBL curriculum, curriculum development, curriculum development model, higher education curriculum.

Introduction

PBL has been a great subject of discussion in the literature for many years within all educational levels. The discussions are mostly about whether PBL works or not, and which educational level is more appropriate to use, or the advantages and disadvantages of PBL in practice. However, rather than spending our time on these subjects, it would be better to understand what PBL stands for first. Of course, searching for only one right definition for PBL would be an effort in vain as there are hundreds in the literature, and this shows us that every single person may have his or her own description or definition of PBL. Hence, no definition should be considered right or wrong. Instead, it would be more ideal to focus on what it really covers and how it has evolved through different practices around the world.

In this study, PBL can be described as an institution-level educational philosophy that combines problem and project based learning in curriculum design. The reason why PBL is a combination of problem and project-based learning in the study is that the concepts of “problem-based learning” and “project-based learning” today do not only stand for a teaching method at university level but also an educational philosophy and an integrated curriculum design approach that all curriculum components (objectives, content, learning experiences, assessment and evaluation) are based on the problems and projects. It is stated in the literature that both have different aims, process and outcomes, which may be acceptable when PBL is only considered as an approach or method for teaching. However, the term PBL has totally been based on learning since its emergence, and it has undergone great changes throughout the years, which created a different concept of PBL in higher education. The reason for this change in PBL is mainly because the higher education has profoundly been effected by many factors such as globalization, industry, technology etc. and transformed throughout the years.

Table 1 shows the transformation of universities through different phases.

Table 1

*Transformation of Universities and Their Characteristics through the 21st Century**

Parameters	Transformation Phases of Universities			
	1st Phase (University 1.0)	2nd Phase (University 2.0)	3rd Phase (University 3.0)	4th Phase (University 4.0)
Period	Medieval Period (1150-1500)	12 th -17 th Century	18 th -20 th Century	21 st Century
Drivers for change	-	Renaissance (The rise of the terms “freedom, questioning the authority, nation-state, secularism etc. and the concept of Bildung)	Industrial Revolution & Globalization (Entrepreneurial and technology- based commercial activities by strengthening the link with the industry)	Changing Professional Life & Societal Needs (Knowledge, skills and competencies demanded from the individuals and society)
Objective	Education	Education and Research	Education, Research, Knowledge Production and Collaboration	Education, Research, Knowledge Production, Innovation, Demand (Society & Economy), Collaboration
Role	Defending the truth	Discovering the nature	Creating value	Innovation and Sustainability
Method Creating	Scholastic Professionals	Modern Science Professionals and Scientists	Modern Science Professionals, Scientists and Entrepreneurs	Modern Science Professionals, Scientists, Entrepreneurs and Social Individuals
Orientation	Universal	National, Regional, Local	International, Global, Competitive	Transnational, Competitive
Cooperation	-	With other universities (Limited)	With Industry and Government	With Industry, Government and Society
Research Organizational Culture	-	Disciplinary	Interdisciplinary	Transdisciplinary
Organizational Identity	Traditional University	National University/Humboldt University	Cosmopolitan University	Open University

* Table 1 was edited by Korkmaz & Kalaycı based on Kyrö & Mattila (2012), Wissema (2009), Korkmaz & Kalaycı

(2019), Zuti & Lukovics (2017) and Pawlowski (2009).

As stated in Table 1, traditional universities that only had an education and instruction-based objective in the first phase started to turn into a more research-based university in the second phase. In the third phase, universities took up new roles focusing more on knowledge production and cooperation. In the fourth phase, adding up new roles and characteristics such as innovation, sustainability, transdisciplinary approach, the type of individual to be educated, change in the field of cooperation, universities started to aim for educating individuals who are able to keep up well with the characteristics of the era (Korkmaz & Kalaycı, 2019). Although many universities such as Aalborg University (Denmark), Roskilde University (Denmark), McMaster University (Canada), Maastricht University (Netherlands), Delft University (Netherlands), Olin College (USA), Worcester Polytechnic Institute (USA) have already structured their curricula to meet these roles, there are still many other universities that have the characteristics of traditional or medieval university (Bleiklie & Kogan, 2007; Lozano & Lozano, 2014; Scott, 2006).

The consequences of globalization, capitalism and industrial change raise important problems that individuals have to cope with in the modern world, and individuals have to fight against these problems. Within this context, universities should educate individuals in such a way that they will be able to find solutions to these problems rather than adapting to them, organize a learning environment accordingly, create benefit for the society, and help individuals become a lifelong learner by self-cultivation rather than shaping them around the skills required only by industry and professional life. Otherwise, this will create graduates as “modern slaves” who only work for others (Korkmaz & Kalaycı, 2019). Sinlarat (2016) states that modern universities have to be considered as the institutions that help individuals to acquire necessary knowledge and skills to be able to adapt the dynamics of the changing society, and universities should be considered from a wider perspective as they does not only support individuals to gain basic knowledge and skills but also the competences they can use throughout their lives. In the literature, these skills are called the 21st century skills (P21, 2017), process skills (Kolmos & Holgaard, 2010; Kolmos, de Graaff, & Du, 2009) or soft skills (Andrews & Higson, 2008; Zhang, 2012).

To fulfill the new roles that universities have acquired through the 21st century, they have to design, develop, implement, evaluate and sustain their curricula in accordance with these new characteristics, roles and objectives (Goodyear, Casey & Kirk, 2017; Lozano & Lozano, 2014; Roffe, 2010; Sterling, 2010; Van den Akker, 2004). In order to run this process systematically, how to design, develop and evaluate the curriculum should be discussed in detail as it will serve as a guide on how to structure the curriculum components (objectives, content, learning experiences, assessment and evaluation) (Jacobs, 1989; Klebansky & Fraser, 2013; O’Neill, 2015). In other words, this systematic process gives curriculum makers a road map to plan a number of issues such as the objectives to be included, approaches to be used to regulate the content, strategies to be used in learning experiences, materials and resources to be utilized, the organization of learning environment, and the assessment of learning.

Purpose of the Study

This study aims to;

1. Analyze the transformation of PBL from a teaching method to an educational philosophy through the change in higher education in the 21st century,
2. Propose a model for an institution-level PBL design.

Method

The model of this study is descriptive. Descriptive studies attempt to describe a situation, problem, phenomenon, service or program systematically (Kumar, 2002). This study is designed according to qualitative research methodology. Qualitative study is defined as a research method that aims to describe variation and diversity in a phenomenon, situation or attitude with a very flexible approach to identify as much variation and diversity as possible (Kumar, 2002). An important feature of qualitative studies is that qualitative data provide enriched and holistic content to identify complex phenomena, events or situations (Miles & Huberman, 1994). The data were collected by document review method. The documents included a wide range of strategic plans, reports, articles, books about the roles and the needs of modern universities. These documents were analyzed through document analysis procedure suggested by O’Leary (2004). To ensure the validity and reliability of the study, the experts were consulted during the whole research process.

1. Transformation of PBL from a Teaching Method to an Educational Philosophy

To better understand the change of PBL caused by the transformation of universities, the historical development of PBL in higher education should be analyzed first. Of course, PBL is not a new term in the literature. PBL as a term based on Confucius, Aristotle and Socrates’s views about inquiry, critical thinking, and learning through experience emerged with John Dewey’s view “Education is not preparation for life; education is life itself”. The term “project” developed by Dewey started to be named as “project method” (after Kilpatrick’s work “Project Method” was published in Columbia University in 1918) by Kilpatrick who was once Dewey’s student (Beyer, 1997; Heitmann,

1996). Kilpatrick, who argued that individuals should take an active role in interpreting what is happening around the world they live in, stated that the project is a method that can mostly be used in vocational education and secondary education. Similarly, he stated that a project should be considered as a “wholehearted purposeful activity proceeding in a social environment” (Kilpatrick, 1925).

Kilpatrick's “project” and “project method” concepts, which are mostly proposed for vocational education and secondary education, have changed with the influence of Piaget, Vygotsky and Bruner's learning theories and constructivism, and turned into an approach, which made it a broader term. In this context, the project method which was developed in order to solve the problems encountered in real life and to learn by using various methods and techniques such as laboratory method (Toci, 2000) turned into an approach aimed at searching for solutions to real problems that exist in real life rather than a method to teach (Fogarty, 1997; Lai & Tang, 2000; Markham, Larmer & Ravitz, 2003; Tang et al., 1997). Through the end of the 20th century, the concept of PBL in higher education was included in the education literature with the term “problem-based learning” within a study carried out by the students of Don Woods in the Department of Chemistry at McMaster University (Canada). And after a while, it turned into a broader term as an educational philosophy in which learning and teaching are centered on problems (de Graaff & Kolmos, 2007; Schmidt & Moust, 2000).

PBL that was originally implemented in medicine also started to be used at Roskilde (founded in 1972) and Aalborg University (founded in 1974) in engineering education. Today, all faculties in Aalborg and Roskilde University have their own PBL models that stand as a sample to show how to implement PBL as an institution-wide educational philosophy. These practices of PBL curricula have been included in the literature as PBL university models (e.g. Aalborg PBL Model, Roskilde PPL (Problem-oriented Project Learning) Model). Through this transformation in PBL, project-based learning has been used as an educational philosophy and an approach to design curriculum according to certain principles, especially at the universities in Europe. The term “project” has been integrated with the curriculum development efforts in higher education and has become a design approach that takes project to the center of the curriculum rather than just a teaching method. At those universities, students form small groups, identify some problems according to the theme determined for that term, and work on projects collaboratively during a whole term or year (these projects should benefit the society). And these projects, which are based on unstructured, complex and real life problems, exist in the formal curriculum and it allocates similar amount of ECTS credit points for courses and projects.

2. A Model for an Institution-Level PBL Design

Educational practices carried out at the tertiary level are of great importance for future generations, and it is the role of higher education to educate creative individuals and to equip them with the necessary skills and to be able to work in interdisciplinary and transdisciplinary teams in professional life. When the strategic reports and plans stated by today's universities are analyzed, it is seen that “benefit to society, society-university-industry cooperation, research & development, innovation, entrepreneurship, competition, knowledge production” are prominent concepts. In this context, although institutional change in higher education has been partially emphasized, almost no emphasis has been placed on curriculum making or development in order for these goals and plans to be put into action.

The model we called SIEDS (Structure-Implement-Evaluate-Decide-Sustain) in this study is based on three broad terms: andragogy, humanism and professionalism. The philosophical components and the sub-components of the model is shown in Figure 1.

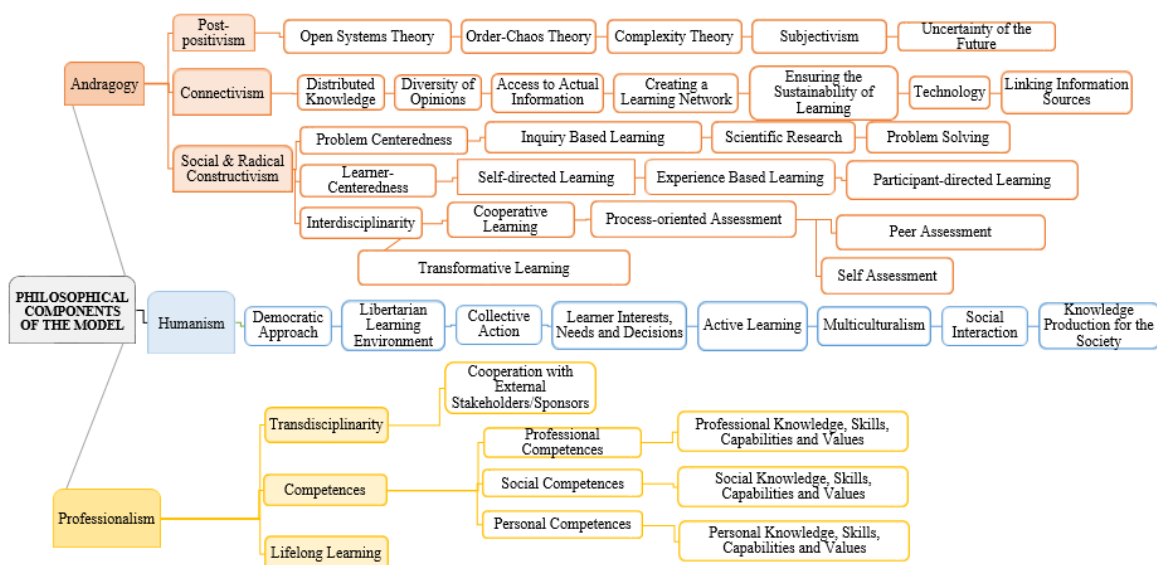


Figure 1. Philosophical components of the model (Created by Korkmaz & Kalaycı)

The term “andragogy” can be accepted as the equivalent of pedagogy at higher education level. Knowles (1973) states that the word pedagogy derives from the combination of the words “paid” and “agogus” in Greek, and it means “the science and the art of teaching and guiding children”. It is a teaching-centered approach, and mostly the teacher decides what, when and how is to be learned (p. 42). However, andragogy derives from the combination of “aner (adult/adult)” and “agogus (guidance)” in Greek. This term is defined as “the science and art of helping adults to learn” (Knowles, 1973, p. 43). This concept, in contrast to pedagogy, adopts a learner-centered approach in which individuals take responsibility and determine their learning needs on their own (Conner, 1977; Nielsen, 1989). Since the proposed model in this study is about higher education, andragogy is preferred instead of pedagogy.

The model is organized according to the principles of open systems, complexity and chaos-order (Doll, 1989) theories that are in the post-positivist approach. This approach is against the idea that knowledge is always objective or that real knowledge can be attained. Therefore, only a limited level of planning can be done by providing students with specific content and experiences. Furthermore, the knowledge, skills, values, attitudes and beliefs that the students will acquire after learning a content and experience may not be the same as those mentioned in the relevant parts of a curriculum or lesson plan. In this context, the concept of the project used in the model does not imply a task that can be carried out by individuals. Project work has been considered as a process in which students from different disciplines work together for a term or a year in small groups. For this reason, social constructivism and radical constructivism, which appeared in Von Glasersfeld’s works, are adopted. Social constructivism argues that the acquisition of knowledge and skills takes place through the interaction with the individual’s environment. In this context, according to social constructivists, learning is an active process involving others around the individual (Schunk, 2012, p. 230). Radical constructivism is based on socially shared experiences, language and the meanings agreed upon. Therefore, knowledge is formed by social negotiation, social interaction, reflective abstraction and self-regulation. This knowledge created by the individual cannot be expected to correspond with “external reality” as each individual’s experiences are different; therefore, there is no single right view of truth or reality (Arslan, 2007). In this aspect, radical constructivism is against positivism and objectivism. Because objectivist understanding is based on the opinion that existed knowledge is always the same everywhere. Moreover, in the radical constructivist theory, the faculty members do not pass on information to students but they facilitate the students and their learning. In this context, the adult learning model is well-matched with the problem and project-based learning models. Knowles (1980) states that learners should deal with problems rather than subjects. Similarly, based on the ideas of the model Paulo Freire and Jürgen Habermas about critical theory, it also features the transformational/transformativ learning model introduced by Jack Mezirow in the 1970s. Mezirow links adult education with social justice and change (Fleming, 2018). Mezirow (1997) argues that the individual should reform the knowledge provided by the authority as individual’s perspective on his/her future learning (belief, value, attitude, sense of emotion) may change. In addition, the interaction with other individuals for learning is critical, and when individuals encounter new information, they question their beliefs, values, attitudes, feelings that already exist. In this process, the learners question individual and social assumptions by thinking critically (Mezirow, 1998). For this change, critical reflection skills should be transformed appropriately according to the conditions of the day, and this transformation process is also a problem solving process (Mezirow, 2000, p. 20).

Humanism is another fundamental component of the model. When humanism is associated with learning (humanistic

learning theory), cognitive and affective needs of learners are taken into account in such learning; learning requires a democratic environment because of the relationship between the learner and the instructor. In addition, individual differences and characteristics of the students are always important and the students can realize themselves, and in a humanistic learning environment, there is no pressure. Similarly, in a humanistic learning environment, individuals are actively involved in learning activities, and decide on their learning materials and methods; it is the student's responsibility to make right or wrong decisions. Therefore, the duty of the faculty members is to respect the student's interests, needs and decisions, to organize a learning environment and facilitate students in learning (Ashworth et al., 2014; Braungart & Braungart, 2003; Cercone, 2008; Connolly, 2016; Ornstein & Hunkins, 2017). Furthermore, everything that will benefit society or contribute to the development of society cannot be evaluated only in the economic context.

The professional context in the model is related to the competences of the learners they are expected to have till graduation. Competence is defined as “the ability to do a job” (Hager & Gonczi, 1996). Competence in terms of higher education is what a person should know, what he or she can do and what he or she will be good at upon successfully completing his study (YÖK, 2010). In this context, the concept is a combination of in knowledge and skills. The concept of competence is widely used within the Bologna Process in terms of higher education. The model also takes into account the framework set out in the Bologna Process. Another important element in the professional context of the model is transdisciplinarity. This concept refers to the production of knowledge by working collaboratively with non-university organizations (municipalities, regional organizations, industrial organizations, etc.) and individuals (civil society organizations, employers, graduate students, etc.) during projects. Transdisciplinary approach argues that the project groups should be in interaction with others out of their university. With this interaction during projects, students get the opportunity to learn the information they need in real life and gain awareness about the professional life.

It is important to determine the roles of internal and external stakeholders involved in the planning, implementation and evaluation of the curriculum for the universities that plan to implement PBL curriculum. In other words, all stakeholders should have an effective cooperation in planning, implementation and evaluation of the PBL curriculum, and a collective work discipline should be adopted. Therefore, policy and decision-making cannot be carried out by the pressure of “management” or “hierarchy”. Deciding which model to use in the development of PBL curriculum is another important issue. Because curriculum development activities are mostly left to teaching staff in many universities. Although this may be seen as academic autonomy and freedom due to the individual approach, it may in some cases prevent the systematic development of curriculum. It would be wrong to say that only one curriculum development model is appropriate for PBL curriculum. However, in few studies related to PBL literature, it is stated that the most appropriate curriculum development model for PBL is Cowan and Harding's (1986) Logical Model of Curriculum Development (Dahms, 2014). This is because the model emphasizes that learning is more important than teaching, it is based on a competence-based approach, and argues that the curriculum development process is often influenced by external factors (external stakeholders, accreditation criteria, etc.) in many aspects (Arsat, 2014; Dahms, 2014). For this reason, Cowan and Harding's (1986) model inspired the curriculum development model proposed in this study.

Curriculum Development Process in the Model

The curriculum development model we called SIEDS (Structure-Implement-Evaluate-Decide-Sustain) was developed based on the PBL principles stated by Barge (2010) and de Graaff and Kolmos's (2007) studies, necessary elements/components in the process of organizational and educational change stated by Dahms (2014) and Thousand and Villa (1995), the logical model of curriculum development by Cowan and Harding (1986) and constructive alignment theory of Biggs (1996). This curriculum development model is shown in Figure 2 (the steps to be followed in the curriculum development process). In Figure 2 some abbreviations are used to explain the contribution of the internal and external stakeholders to the process of developing a PBL curriculum. In the model, each step is numbered in order to follow the process sequence in the curriculum development. In addition, the units involved in the curriculum development process are indicated in parentheses in the steps of the curriculum development process. The steps in the model (Figure 2) will serve as a guide for institutions that plan to organize their curriculum around PBL principles systematically. Although the process followed through the steps look similar to some curriculum development models in the literature due to its circular and cyclical shape, steps such as 1, 3, 6, 7, 8, 10, 16 and 21 reflect the distinctive features of the model. Especially, Step 3 (deciding on which curriculum strategy will be used) is the one that has to be considered carefully as it will create an institutional decision that is related to shaping the whole curriculum according to PBL from freshmen to senior year.

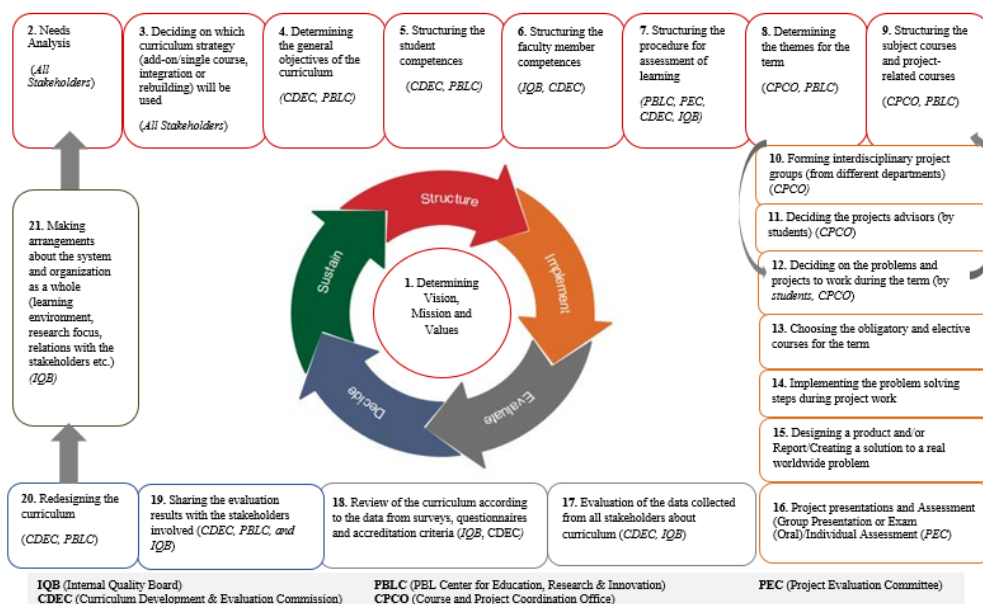


Figure 2. Curriculum development process in SIEDS (Structure-Implement-Evaluate-Decide-Sustain) (Created by Korkmaz & Kalaycı)

These strategies mentioned in Step 3 are shortly described in Figure 3 at individual level, system/group level and philosophy/institution level and how to implement them at different levels are explained.

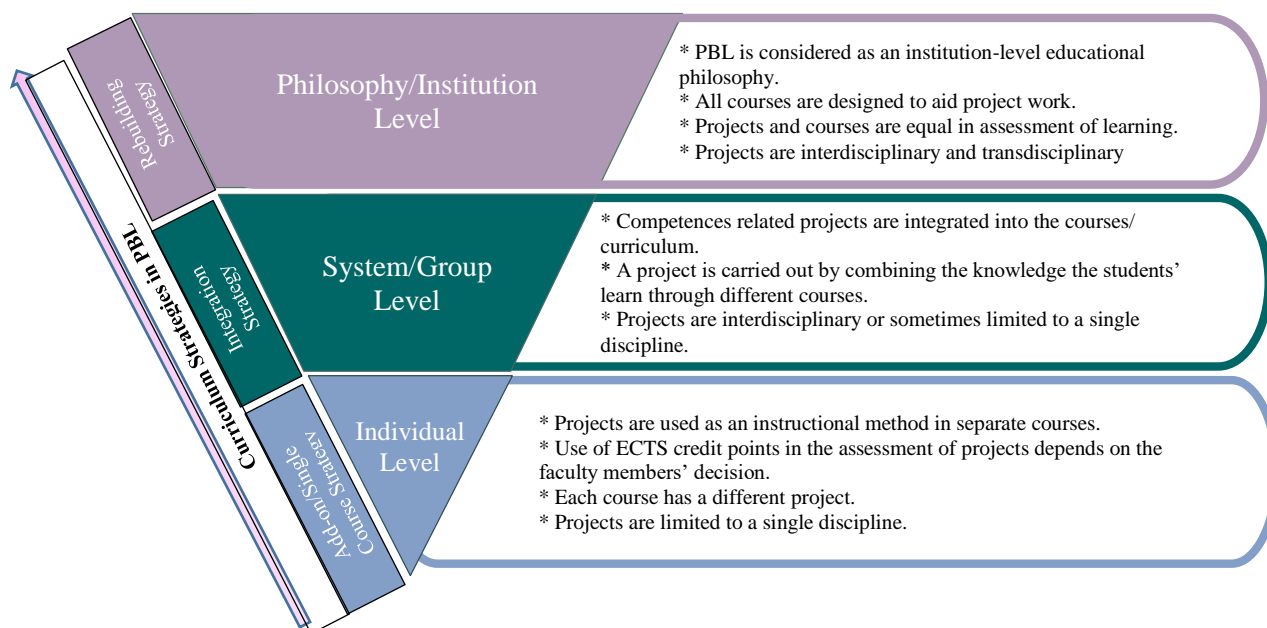


Figure 3. Curriculum strategies in PBL and their implementation at different levels. (Figure 3 was edited by Korkmaz & Kalaycı based on Moesby, E. (2004). Reflections on making a change towards Project Oriented and Problem Based Learning (POPBL). *World Transactions on Engineering and Technology Education*, 3(2), 269-278)/ As can be seen in Figure 3, institutions can implement PBL according to the strategies they decide (Step 3) during the curriculum development process in the model. It should be kept in mind that the decision to implement PBL at the philosophy or institution level is a radical process, not only a curricular change but also an organizational change will be needed. Therefore, the institutions that plan to implement an institution-level PBL curriculum may prefer to use a hybrid model that blends these strategies through different years. For example, using add-on or single course strategies (individual level) for the freshman years and then having integration strategy (system-group level) through

rebuilding strategy (philosophy-institution level) will make it easier for the institutions to cope with the problems during curricular and organizational change.

Conclusion

In order for universities to perform the roles of education, research, knowledge production, and serve for the benefit of the universe and society, the curriculum they use has to be transformed and restructured, and the models that are appropriate for modern universities (4th generation universities) have to be developed. When the historical development of PBL in higher education is analyzed, it is seen that PBL curriculum is appropriate for the goals and roles that today's universities should have. In addition, it can be said that PBL curriculum draws an effective framework for the knowledge, skills and competencies demanded from the individuals in the 21st century as they enable the students to acquire skills such as cooperation, problem solving, critical thinking and research, etc.

Another fact is that the experience faculty members will gain through PBL will enable them to learn together with the students, and to recognize that they are not only researchers or lecturers but also lifelong learners. Similarly, the fact that the faculty work in cooperation with each other and with non-academic stakeholders contributes to their personal and professional development. In this context, an understanding that focuses more on the terms “learning” and “facilitation” than “teaching” or “instruction” will be adopted, the obstacles between the faculty and the student will be removed, and a totally learner-centered educational approach will be achieved.

The reason why many universities in Europe and America such as Aalborg University, Roskilde University, Maastricht University, Delft University, McMaster University, Olin College, and Worcester Polytechnic Institute are considered successful is that they bridge the gap between theory and practice. One of the common characteristics of these universities is that their practice is carried out based on problems and projects although they implement different PBL models. As higher education has been rapidly developing in the 21st century, the PBL curricula should be integrated into higher education system more, and more scientific research should be done in this field.

The universities that plan to implement PBL should keep in mind that curriculum change also results in the change of organizational culture (Kolmos, Hadgraft & Holgaard, 2016). In this context, a university that plans to design its curriculum according to PBL can start with the add-on strategy, then use the integration and rebuilding strategies respectively. Or new departments or faculties can begin with the rebuilding strategy to design their curricula if they have enough experience in PBL. Because it may be easier and more effective to create a new system than to make changes in the existing system or to decide the change before the system starts. However, no matter which strategies are used, it should be noted that the process of change will take time. Therefore, it will be necessary for the universities to get a permanent institutional support from all units of the organization regarding the change in the educational approach.

Biography

Prof. Dr. Nurdan Kalaycı completed her BA, MA and PhD degrees in curriculum and instruction at Ankara University and Hacettepe University Faculty of Educational Sciences respectively. Her research interests include learning and teaching process, active teaching methods, problem and project based learning, high-order thinking skills, evaluation of the academic performance of faculty members in higher education institutions, quality in higher education, and gender equality in education. Kalaycı received state scholarships from China, Israel, Finland ([University of Jyväskylä 1989-1990 and Sept. 2013 – Feb. 2014](#)) and USA. With her Fulbright scholarship in the United States, she carried out a long-term research on Multiple Intelligence theory related school of Key Learning Community School (August 2002 – September 2003) and conducted studies at Indiana University-Purdue University at Indianapolis (IUPUI), and with another scholarship at Michigan State University. She has national and international publications on curriculum evaluation and gender equality, quality in higher education. She is an activist about environmental problems. She works as a faculty member at Gazi University, Gazi Education Faculty, Department of Educational Sciences, Curriculum and Instruction.

Dr. Güneş Korkmaz holds a PhD degree in curriculum and instruction from Gazi University, Gazi Education Faculty, Department of Educational Sciences, Curriculum and Instruction. During his PhD, he visited several PBL universities such as Aalborg University (Denmark) and Worcester Polytechnic Institute (USA). His research interests include higher education, problem and project based learning, curriculum development and evaluation, quality assurance, organizational change, project management, problem solving, decision making and facilitation. He worked as a coordinator of foreign languages department, instructor and curriculum expert for several universities. He currently works as a teacher at a K-12 school (Özel Ege Lisesi) in İzmir, Turkey. The author has books and articles published in the field of educational sciences.

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WHY NOT? 1968, CRITICAL THEORY AND EDUCATIONAL ENTREPRENEURS

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ABSTRACT

The year 1968 forever floods through the consciousness of American Baby Boomers. Robert Kennedy's question from that fateful year, "some men see things as they are, and ask why, I dream of things that never were, and ask why not?" helps to power that flood. Even today, Boomers of good conscience who are American educators continue to ask: "why not?" Why not throw out the systems that leave our country's educational achievement stagnant, or even dropping? Why not wash away the old and develop new approaches to 21st century education? Critical Theory (CT), like Kennedy's credo, is a liberation doctrine for students and educators alike, that requires educational leaders to see things as they are not and to pursue non-normative solutions. CT's macro evaluation of our educational systems may serve as a strategy for educational leaders who seek new paradigms for reform. Educational entrepreneurs, unlike most educators, take risks and are creative: They behold the future and they ask why not. By utilizing critical theory as a pathway, entrepreneurial educators could then have both the courage, as well as the means, to change the American education system. After 50 years of trying so many other paths, why not let Critical Theory guide our way?

Keywords: Critical Theory; entrepreneurial leadership; Boomers

The year 1968 flows through the consciousness of American Baby Boomers. It was the year of the Vietnam War culmination, student riots on campus, delegate riots at the Chicago Democratic convention, and African American riots in the cities. Perhaps because he was martyred, Robert Kennedy's 1968 presidential campaign theme remains, for many Boomers, the theme for our life's work: "Some men see things as they are and ask why, while others see things as they are not and ask why not." Ironically, Kennedy's theme is inextricably tied to the work of his enemy, President Lyndon Johnson, who launched new initiatives in federal aid to education and the War on Poverty during the 1960s; areas in which social reformers continue to work more than 50 years later. Despite Kennedy's clarion call and Johnson's initiatives, institutional isomorphism in education, as well as institutionalized racism in the body politic put enormous constraints on the creativity, risk propensity and bold thinking of Boomer social reformers. Despite those normative limitations, perhaps by using Critical Theory as our operating framework, educators may continue to move toward our goal of social justice for an increasingly diverse population. This paper aims to answer Kennedy's "why not" as it relates to that 50-year struggle in the field of education.

As noted, Critical Theory (CT) offers a pathway for educators to answer the critical question: Why Not? A CT approach to social science calls for examining the means of liberation for individuals in their institutions, their work and their family lives. In other words, CT calls on all of us to no longer uncritically accept the basic assumptions of society, its norms and its institutions. Instead, critical thinking leads us to push society into establishing more human oriented systems (Alvesson & Wilmott, 1992). Hence Critical Theory, being both theoretical and practical, offers a conceptual framework for educators to see things as they are not, and ask "why not?" For example, in a world now driven by transparency and technology, why not try restructuring institutions, programs and instruction in ways that are more liberating, more enlightening, and more creative, and in ways that would fit the 21st century? As Dantley puts it:

Critical theory provides an attitude, a way of conceptualizing reality, and a way of addressing social change through individually formatted actions. It does not prescribe; it does not determine; rather, it attempts to educate, and in so educating attempts to introduce us to our surroundings and how they consciously or unconsciously influence us. (Dantley, 2005, p. 90)

Stepping outside of the education world for a moment, the ongoing political, financial and human drama at Facebook provides an excellent opportunity for application of Critical Theory in the private sector. Facebook is both a manifestation as well as a metaphor for our time. In watching this drama, CT urges us to view Facebook, not just as a technology that empowers billions of people across the world, but also as a business that is a manifestation of the white male power structure. That is to say that while Facebook is led by millennials dressed like characters from Star Trek, the company has the same regard for women and minorities as did the white Mad Men characters in Brooks Brothers hats of a more recent television series. Facebook is also a huge capitalist instrument of power that impacts the very basic assumptions of our society. When I read of Facebook's existential threat to critical issues such as freedom, access and equity and democracy, I am reminded of my Boston University studies with Bob Cohen and Howard Zinn in the late 1960s.

The question for 21st century educators is the same one as our society must put to Facebook. Just as Facebook's intended or unintended consequences threaten liberal democracy, *we see* education systems that squelch the freedom, access and equity of students and professors. Why not knock down the walls and free those stakeholders to utilize their creativity to build entirely new education systems?

Critical theory holds that we must focus on the overarching issues of the day and ask why our institutions and professional practices are not more democratic and collaborative? In other words, educational leaders should also put our consciences to work and ask why we are not changing systems that tolerate... "(1) the misuse of power in society-resulting in mistreatment of some individuals and groups..." (Jermier, 1998, p.236)? Ignoring our responsibility as social scientists to question the basic tenets of our profession and the social environment that surrounds it, is tantamount to surrendering before the debate on issues is even begun (Alvesson & Wilmott, 1992). In its practical application, CT calls on managers and leaders to emancipate their workers (Alvesson & Willmott, 1992) by collaborating with each other to make their own programs less subject to the organizational rules and norms, and more democratic. Small micro-emancipations may include such items as changing the organization's language and hierarchy by equalizing job titles or by assigning office spaces on a non-hierarchical basis. In the education profession, principals and college deans could work to emancipate their students and instructors; giving them freedom to create their own teaching and learning spaces. And, finally, applying CT thinking to schools could lead us to empowering community level action and local control of schools (Foster, 2004). All of these are small steps on the road to liberating students, teachers and even administrators, and allowing them to all build an education system that meets the needs of the community (Foster, 2004). So why not try them? Like the field of

entrepreneurial leadership, CT asks us to take the opportunity, to ignore the risk, and to become creative.

Entrepreneurial leadership, the latest fad in educational leadership programs, is now taught in numerous education colleges, including the Johns Hopkins School of Education. Whether it is examined from the managerial, economic, psychological or sociological perspective, entrepreneurial leadership literature seems to focus on three key concepts: 1) a comparatively high tolerance of risk for both themselves and their organizations; 2) understanding their environment and the pursuit of opportunities; and 3) the vision to see things as they are not and to promote creative alternatives. Furthermore, entrepreneurs are not inhibited by the challenge of limited resources either (Baker & Nelson, 2005), which is a good approach for education leaders. Finally, social entrepreneurs are also change agents that seek to improve the social environment (Zietlow, 2001). And that sounds very much like applied Critical Theory.

These aforementioned primary concepts of entrepreneurship, tolerance for risk, pursuit of opportunity, and creativity, also sound a good deal like the job description for 21st century education leaders. Therefore, if we are to respond to the critical issues of our time, we may want to prepare education leaders as entrepreneurial leaders. After all, educational entrepreneurs should also, among other traits, recognize opportunity, react proactively, and harness creative potential (Brown & Cornwall, 2000). Furthermore, another component of the job description for education leaders, to become social justice champions, also sounds very much like the conceptual leadership framework of Critical theory. Therefore, if we choose to prepare entrepreneurial education leaders to respond to the critical questions of our time, does it not make sense for those leaders to also explore Critical theory as a pathway to reform?

If so, we have a good deal of work to do. For example, at the Hopkins School of Education, we begin each entrepreneurial leadership course with students completing a Likert scaled survey that ascertains their levels of risk aversion and creativity (Dewett, 2006). At the beginning of the term, most of the students, many of whom are teacher leaders, principals and newly minted deans, score high on the creativity scale. But they also score highly on the risk aversion scale. I believe that the high scores on risk aversion, a major stumbling block to entrepreneurial leadership, result from educator preparation in education colleges and/or their experience as leaders in their systems. And that is because colleges and other education organizations reward actors that support the norms of the predominant society. Critical Theory, on the other hand, would lead the Johns Hopkins faculty, as well as the other educators here today, to move beyond the normative and the bureaucratic and to create new educational paradigms.

Entrepreneurial opportunity, low risk aversion and creativity offer the tactics for educational reformers, and CT offers the strategy. Educational leaders should consider CT deeply in our professional practices. After all we lead organizations that serve children (k-12) and institutions that serve society (universities). The strategic pathway of critical theory asks us to take the opportunity to ask why not and to change those institutions. This theory asks leaders to think beyond the organization and its norms and to consider how things could be more democratic and collaborative (Jermier, 1998). CT asks us to think boldly and creatively, no matter what the organization or sector in which we practice. No profession and no knowledge, including the education profession, according to critical theorists, should pass without an examination of its leadership, hierarchy and its critical power relationships.

For example, no examination of educational institutional norms can overlook the fact that while the public schools profess to promote democracy, they are, for the most part, “agents of the state” (Jenkins & Carpentier, p.282, 2013). Teachers, students, parents and, sometimes, even administrators, may feel powerless to change the normative practices of the system. Critical theory also suggests that teachers are under pressure from the ruling establishment themselves, both by the fact that their work is measured by the normative rules and by the constraining teacher preparation programs that dictate the rules of the game (Skourdombis, 2016).

In fact, even high stakes-testing and the OECD international comparisons of national educational achievement scores may be viewed as mere exercises in normative, bureaucratic control (Foster, 2004). The rules of the education game were not set up to benefit children and students. As for IHE leaders, we may be *otherblind* (Patterson, 2013 p.11), that is to say we are blind to the reality that leadership’s support of women, minorities and the LGTB community is only token, and not real systemic change.

Because entrepreneurship emphasizes boldness, vision and risk-taking, teaching and learning would benefit from entrepreneurial educators and organizations. Furthermore, intra-preneurs, that is to say entrepreneurs inside of institutions, are also more flexible and collaborative and, therefore, have the skills to build learning organizations. Such tactics are also more likely to engage students and staff alike. Creating intra-preneurial learning organizations with bold, empowered and innovative instructors within institutions, will more likely lead to more creative answers to traditional teaching and learning challenges (City, 2016). And those are the very steps that Critical Theory encourages us to take.

Conclusion

Society has changed dramatically in the last 50 years with civil rights and more opportunities for African Americans,

Hispanic Americans, women and the gay community. However, after 35 years in and out of higher education administration plus another five years teaching k-12 and higher ed leaders, I feel more, not less, constricted in my professional practice. As an administrator, I spent years listening to university lawyers and accountants telling me no, you cannot do that. As a teacher I spend hours encouraging education leaders to think past their institutional constraints. How can we, the entrepreneurial leadership faculty, find ways to move those students beyond the limitations that bind their thinking? How can we get them to ask that critically important question: Why Not? In every classroom in every school and university across this country? Perhaps Critical theory and entrepreneurial leadership will lead us to do just that.

Biography

Henry M. Smith, EdD., is an assistant professor at the Johns Hopkins School of Education in Baltimore, MD, where he previously served as the Associate Dean for Development and the Executive Director for Partnerships in Educational Transformation. He also held the positions of Director of Corporate Relations for Tufts University in Medford, MA, and Assistant to the President of the National Labor College in Silver Spring, MD. Dr. Smith previously served as Mayor of Dover, N.H., New Hampshire State Director of Public Transportation, and, from 1993 until 1995, as a United States Assistant Secretary of Education.

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DILEMMAS IN TEACHING ENGLISH AT MONTESSORI INTERNATIONAL PRE-SCHOOLS IN VIETNAM

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ABSTRACT

Montessori education philosophy has been developing in the world for more than 100 years but recently implemented in Vietnam for more than 10 years. More and more Montessori International schools are being opened in Vietnam, facing higher and higher demands from parents, especially the demand for the English teaching quality. However, Montessori kindergarten class is a special teaching and learning environment having certain do's and don'ts that teachers must follow in their teaching process. The gap between Montessori philosophy and the English teaching methods causes a lot of dilemmas for teachers of English in the class. The purpose of this study was to identify the dilemmas of English teachers in teaching English as foreign language in Montessori international pre-schools in Vietnam, figure out the causes of those dilemmas and propose the solutions. The research methods are on-site visits and interviews, document analysis. The research findings show that the dilemmas mainly come from different viewpoints from stakeholders on teaching methodologies, learning outcomes and learning devices.

Keywords: Montessori, pre-school, teaching dilemmas, early childhood education, early education

FACTORS INFLUENCING TEACHING CHOICE AMONG ARAB-ISRAELI STUDENTS

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ABSTRACT

With a rising surplus of teachers in Israel, it is surprising that many high school graduates still go to teaching as a future career. This is specifically the case among the Arab minority living in Israel, and this is mainly true about EFL teachers. The current study tries to understand what are the motivations which lead high school students, with an overwhelming majority of females, to address teaching as a future career. A paucity of research was held on the topic in Israel, and to the researchers' knowledge no previous research on career choice was held on the Arab minority living within the borders of Israel. The results are comparable with parallel findings from previous studies worldwide. For the purpose of the study, two researchers interviewing first and second year undergraduates included questions on motivations which led them to choose EFL teaching as a future career. All themes mentioned in the interviews were included on a questionnaire designed by the researchers, and based on Manuel and Hughes, 2006. The [questionnaire](#) was distributed to English department students (N=100) in the different levels of undergraduate studies at AlQasemi Academy. The questionnaire sought to gather data on factors which influenced the participants' choice to undertake EFL teaching degree and their perceptions of teaching. The study found that the majority of participants made their decision to teach based on different reasons, including mainly love of the subject, social and cultural reasons, specifically family pressure, as well as the convenience of lifestyle of female teachers.

Keywords: motivation, teachers' education, EFL teachers, career choice.

"SUDDENLY I SAW MY SON IN HIM" MALE-TEACHERS' PERCEPTIONS OF THE MEANING OF THEIR FATHERHOOD EXPERIENCE IN THE PROFESSIONAL FIELD

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ABSTRACT

The current study focuses on male-teacher's perceptions of the meaning of being a father in the teaching profession. The research is based on the reports of 43 Israeli teacher-fathers, using semi-structured interviews. Main findings indicate that research-participants see fatherhood and teaching as an opportunity for mutual enrichment. The study presents 4 major ways these male-teachers see the use of their parenthood experience in their practice as teachers: 1. Recognizing different characteristics of their students 2. Accomplishing a better empathy towards the students 3. Implementing parental personal-interaction experience with the students 4. Understanding the students'-parents point-of-view. Implication for teachers'-training and counseling are discussed. Pathic knowledge is suggested as a theoretical framework in order to implement the study's conclusions in the education field.

Keywords: Male-teachers, teacher-father, fatherhood, work-family relations, teacher-student relations

THE DISCUSSION METHOD OF TEACHING: ENRICHMENT OF UNIVERSITY STUDENTS' LEARNING

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ABSTRACT

The current paper attempts to examine the various aspects of the discussion method of teaching at university and its role in enriching students' linguistic and academic skills as well as its shortcomings. In Oman, research on English language teaching at universities and colleges show that a considerable number of students who move from secondary schools and join higher education institutions would confront difficulties in using the English language to meet their personal, social, academic, and career needs efficiently and appropriately. The discussion method assists in establishing a rapport with students, stimulating their critical thinking and articulating ideas clearly. It is relatively acceptable among university academics who use it to promote active learning and long-term retention of information. It could provide students with a platform to contribute to their own learning and would offer the lecturer an opportunity to check students' understanding of the material. Critics argue that some problems may show up such as that several participants dominate the discussion sessions while other students may remain passive, and often, resentful. The discussion could also include other signs of limitation such as that it may get off track or that only few students may dominate it during the whole session. Hence, the objectives of this research study are to identify students' views and opinions of the use of the discussion method in teaching English as well as its strengths and weaknesses. The findings showed that majority of respondents indicated that a good opportunity to interact is provided during the discussion and that the lecturer is not the sole authority in class. The implications of this research could be reflected on students' learning through their participation in class discussion.

Keywords: discussion, teaching, enrichment, university, learning

1. Introduction

The lecture method has been used for years as a means of transmitting cognitive or factual data from a teacher to a group of students (Ganyaupfu, 2013). This method is one way channel of communication of information since the emphasis is mainly on the presentation of the topic and the explanation of the content to the students (Richards & Rodgers, 2014). Though lectures are much criticised as a teaching method, Paul (2015) reports that universities have not yet found practical alternative teaching methods for the majority of their courses.

Students in the age of global technological advancement have an extensive and instant access to information they require with a single click of a mouse, meaning that they expand the scope of their knowledge whenever and wherever they wish. The lecturer and library are no longer the limited sources of academic learning at university. Students may attend classes with other information than is provided in a normal lecture (Novak et al., 2004) to contribute to their own learning.

The discussion method could be one of the available teaching methods utilised by university lecturers (McKeachie & Svinicki, 2006) to promote learning. Research on the efficiency of group discussion methods has shown that team learning and student-led discussions produce favorable student performance outcomes, and foster greater participation, self-confidence and leadership ability (Perkins & Saris, 2001; Yoder & Hochevar, 2005).

2. Literature Review

2.1 What is Discussion?

Generally speaking, 'discussion' could be considered an activity which involves written or oral expression of different points of view in a given situation (Cashin, 2011). Moreover, Brookfield and Preskill (2005: 6) define it as 'an alternately serious and playful effort by a group of two or more to share views and engage in mutual and reciprocal critique'. Proper discussion would assist learner participants to reach a critically informed understanding of the relevant topic, self-awareness and capacity for reflection, appreciation of cultural diversity, and informed action (Applebee et al., 2003; Parker, 2003).

2.2 Discussion in the Classroom

In a university class, discussion could be among the common strategies which would be used by lecturers to stimulate active learning (Kim, 2004). If the objectives of a course are to promote long-term retention of information, to motivate students toward further learning, to allow students to apply information in new settings, or to develop students' thinking skills, then discussion, as McKeachie et al (2006) claim, is preferable to lecture.

Discussion, when used during classroom hour, is an effective way to facilitate learning. It can offer the lecturer an opportunity to check students' understandings of the material and comprehending ideas thoroughly through expressing their own viewpoints and questions (Nystrand, 2006). Sybing (2015) reports that discussions provide students with a platform to participate in their learning process. When students are actively involved in using the relevant material, learning would be more interesting for them and students would be more motivated.

Classroom discussions are valuable for developing critical thinking when students learn how to arrange their ideas logically and then present them convincingly (Silverthorn, (2006) Later in life, they may find themselves in situations where they would participate actively in social debates (Brookfield & Preskill, 2005).

2.3 Discussion and Second Language Learning

Han (2007) emphasizes that a sufficient knowledge base established prior to discussion tasks is essential to learner participation. When students gain confidence in their knowledge, then they are more motivated to participate freely in the oral discussion. Thus, the class discussions may effectively assist in the second language teaching and learning both by presenting significant, interesting topics to incorporate the students (Stanley & Porter, 2002) and by offering a wide range of opportunities for students to interact and reach a useful negotiation for meaning (Kim, 2004).

In an English teaching context, the foreign language could be a great obstacle to the success of group-discussion since some of the learners may not have enough language tools to express their thoughts and ideas (Henning, 2005). Also, Rotenberg (2010) points out that as students may not be familiar with the language of discussion e.g. summarising points, signalling agreement or disagreement and turn taking, the lecturer's assistance, therefore, may be needed to make text-discussion possible in the language classroom.

2.4 The Role of the Lecturer in Discussion

In order to start a constructive class discussion, lecturers could spend more time and effort to prepare thoroughly for a discussion than for a lecture. Although the students present the ideas, lecturers may have sufficient knowledge of the subject matter to be able to absorb the flow of ideas (Anastas, 2010). They must be aware of ideas that may lead the lecturers off on a tangent and direct the discussion away from these ideas. The lecturers may also guide the students away from irrelevant ideas and toward the desired aims without dominating the whole discussion (Brookfield & Preskill, 2005).

Discussion approaches are appropriate to a number of objectives which include providing the lecturer with feedback about students' learning, meeting higher-order cognitive objectives, such as application, analysis, synthesis, and evaluation as well as allowing students to become more active contributors to their own learning (Gronlund, 2004; Han, 2007).

2.5 Restraints of Discussion

Discussion not only has positive aspects, but it also has some visible negative ones. During discussion, it may be difficult to get the participation of all students (Brookfield & Perskill, 2005). Also, discussion could be more time consuming than lecturing, and not well suited to covering significant amount of content. Effective discussion requires more forethought than do lectures, and in discussion the lecturer has less control than in lecturing (Cashin, 2011).

There may be some other obstacles to disrupt smooth discussions. Class discussion at university may become less effective with a number of students that exceeds 20 (Brookfield & Perskill, 2005). As the class size increases beyond this limit, individual participation decreases and the opportunity for the class to focus on a particular topic is reduced (Chingos, 2013). Experienced lecturers, however, may endeavor to utilize more effective class management to establish a proper class environment.,

3. Method

This research employed quantitative data collecting techniques to collect data. The research starts with a survey that aims at looking in depth into the students' views on the discussion method in teaching English at university. The quantitative data collection technique involves conducting and administering a questionnaire. The questionnaire consists of forty items which are divided into five categories: a. General preferences, b. Improvement of language/linguistic skills, c. Cognitive enhancement, d. personal growth and e. Management of learning. The participants comprised ninety nine students from third and fourth years in the department of English at a university college in Oman. The research is, thus, designed in a way that would allow the researcher to gather, through the coordination with this department, as much data as possible which would assist in answering the research questions. The result would facilitate the development of a framework which could be applied in English classes when the discussion method is used.

4. Findings

Students had to respond to forty items divided into five categories to gather information on their perceptions of the discussion method. The analysis of students' views and opinions of each of the five categories revealed that category 'Improvement of language/linguistic skills' has an agreement mean value of 3.89 to be placed in rank 1 while the category 'General preferences' has a neutral mean of 3.26 and placed last in ranking among the other five categories. It is observed from the students' responses to the discussion method with reference to category 'General preferences' that students agree that they 'like lecturing as well as discussion during the same lecture', 'they benefit from discussion', 'discussion method should be applied to other subjects too', and 'they like to have discussion more often'. Students, however, reported a neutral mean towards 'I intend to apply discussion method in my teaching career.' and 'I like to listen to the lecturer than the students'. Neutrality was also noticed in 'concentrating on the text is useful'. Students, however, disagreed that 'discussion is a waste of time' and 'I feel bored during the discussion'.

As for category 'Language/ Linguistic Skills', students high mean is found as they agree that 'pronunciation improves by discussion', and 'students' command of the English grammar improves'. Students agree that their 'vocabulary increases by discussion', their 'fluency develops by discussion', they are 'able to listen to others' opinions and take notes', that 'students are able to ask and answer questions', that 'students are able to express ideas which are understood by others', they are 'able to give a short talk on the topic of discussion', and they are 'able to make an oral summary of topic'.

Students' high mean in category 'Cognitive Enhancement' is noticed as they agree that discussion sessions 'broaden their general knowledge' and students also agree that they have the ability to 'distinguish between different opinions in discussion'. Students, however, agree relatively less regarding the ability to 'identify ideas in the topic of discussion', the ability of 'comparing ideas with others', of the 'ability of students to extract details', and in relation to the ability of students to 'analyse information while listening'.

Students' high mean is realized as they agree in category 'Personal Growth' with the 'fear among students to express their opinions', with the students' 'ability to state viewpoint without hesitation', and with the 'improvement in self-confidence during discussion'. Nevertheless, the students identified relatively less where students 'expect lecturer to ask for their opinions' during the discussion, with their 'preference of others to state their opinions' and where students are motivated to some extent to 'participate in future discussion'.

In the fifth category 'Management of Learning', students' high mean is clearly shown as they strongly agree that the 'lecturer notifies students in advance of the topic of discussion', that 'equal opportunities should be given by lecturer

to students to talk' and as lecturer may 'raise topics for discussion with students'. Students, however, agree that 'freedom in participating in the discussion' should be available for students, students 'forming sentences with the help of lecturer', that 'topics are relevant to the preferred choices of students', the lecturer 'interferes occasionally in the discussion', and where lecturer 'correcting students' pronunciation'. Nevertheless, disagreement of students is noticed in the item 'few students only talk all the time.' and finally where the lecturer 'imposes points of view on students'.

5. Discussion

5.1 Students' views on using the discussion method

In discussion sessions at university, students do not feel bored and they believe that discussion is not a waste of time. Moreover, they do not accept the idea that only few students talk all the time and the lecturers impose their ideas during the discussion (Wallace, 2004). Students' participation in class activities would have an impact on their real learning as they would be motivated and encouraged to participate in future discussions.

It may appear from the above details that students prefer to have both lecturing and discussion during the same class, but they stress that they benefit from discussion and like to have discussion more often in the class. Students also believe that they would be able to improve their various essential language and linguistic skills through the active participation in the class discussion. This trend is significant for students as these skills would enable them to use the language in developing their abilities to form ideas and points of view when reading language and literature texts (Ramsden, 2003).

Most of the students stated their confidence in enhancing their cognitive aspects by discussion. Although they agree regarding their ability to identify ideas during the discussion and broaden their general knowledge, yet some are less assured whether they are able to analyze information, extract detailed opinions or compare their ideas with the others'.

Students affirmed that they develop self-confidence during the discussion, state opinions without hesitation and are motivated to participate in future discussion. However, some students were less confident in presenting their opinions as they preferred to wait for the lecturer to encourage them to do so, or other students to carry out this task (Brookfield & Perskil, 2005).

Students' responses to the discussion method, also, indicate that they prefer the lecturer to notify them about the topic of discussion in advance in order to have sufficient time to gather relevant information to manipulate during the discussion. Also, Students concede that in a discussion class lecturers should give them equal opportunities to talk during the discussion and they demanded that the lecturers raise topics for discussion in collaboration with them through including them in selecting these topics to be discussed in class, feel free to participate in the discussion, and help them form sentences during the discussion (Boyd & Maloof, 2000).

5.2 Students' benefits from the discussion method

It can be verified from students statements that they benefited from the discussion method in teaching the English language and literature as it offers them a chance to express their thoughts, helps them to improve their English as well as expanding their knowledge in preparation for future careers. They also get information from diverse sources during the class time.

It was also noted that students would be able to ask questions and get information from their lecturers as well as from their colleagues during the discussion. Moreover, students may learn how to respect and listen to other speakers. Thus, this method provides students with opportunities to speak, share ideas and improve language communication skills and improving their self-confidence as well as their higher-order thinking abilities (Eison, 2010).

6. Implications for teaching and learning

The implications for teaching and learning are noticeable. The discussion method as shown by the findings assists students in improving their language and linguistic skills, develop their cognitive abilities, enhancing their personal growth and provide the academic atmosphere to manage their learning. The use of the discussion method leads to the accomplishment of many other objectives among which are providing the lecturer with feedback about students' learning, meeting higher-order cognitive goals, such as application, analysis, synthesis, and evaluation which help students develop interest and values and change attitudes. The implications of the use of the discussion method could be extended to the social side of education (Elkind & Sweet, 2000).

Lecturers of English language and literature at university may accept the fact that actual participation of students in their learning is an urgent and significant step to achieve the goals set by their educational institutions. It certainly does not affect the role of the lecturer as an educator and leader. On the contrary, it could create an active and enjoyable atmosphere for exchanging knowledge and views which lead to improving the academic skills.

7. Conclusion

To conclude, it would not be unusual to state the fact that good teaching expectedly leads to sufficient learning. Learners may need more participation in class to consolidate their learning. The effective method of teaching in view of students could have a great impact on the outcomes that would be eventually achieved by them at the end of a course. The role of the discussion method in enriching teaching and learning process may be obvious.

The discussion method could encourage the active participation of students during the lecture time as there would be interactions between students and lecturer and also among students themselves. Through sharing, exchanging and advocating of ideas and opinions, learners have the opportunity to express themselves, defend their points of view and shape their thoughts through the contrast and comparison with those of their fellow students.

The study indicated that the discussion method improves students' ability to think and could be more tempting to learning than mere listening to a lecture. It may also assist in fostering intellectual growth, individual expression and character development. It offers students opportunities to exchange thoughts and views with each other and heightens language proficiency through constant reinforcement and use. Lecturers, therefore, may bear a huge ethical responsibility towards themselves and their students by choosing the most effective method of teaching in their classes.

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LEARNING ANALYTICS IN THE UNIVERSITY DOMAIN: THE NEED FOR A STRUCTURED PROPOSAL

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ABSTRACT

A growing interest for a better exploitation of data from various sources and an increasing number of “actions” have been settled from Universities to be more effective in Learning Analytics (LA) management. For this reason, scholars and practitioners have approached LA from a range of perspectives: it is necessary to identify not only the aims that can be achieved by using LA but also what should be done to attain these aims and which are the different actors involved that could benefit from LA.

Generally, LA are considered as measurement, collection, analysis and reporting of students' data and their contexts, to optimize learning and the environments in which they take place (Khalil & Ebner, 2016). Starting from this definition, in our paper we conduct a literature review about LA, in order to explore the current processes/actors in data collections. Our purpose is to demonstrate that a conceptual systematization of LA is needed to be able to design a proposition of an LAs architecture for the University domain.

Keywords: Learning Analytics, dataset, learning personalization.

Introduction

LAs processes draw from, and they are strictly related to, a series of other domains of study comprising business intelligence, web analytics, academic analytics, educational data mining, and action analytics (Elias, 2011). LA are typically defined as “the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which they occur” (Khalil and Ebner, 2016). This definition comprises techniques such as predictive modelling, building learner profiles, personalized and adaptive learning, optimizing learner success, early interventions, social network analysis, concept analysis, and sentiment analysis (Siemens, 2012).

Interest on how data can be used to improve teaching and learning has shown unprecedented growth (Fournier et al., 2011; Ifenthaler and Widanapathirana, 2014). As with any new area of practice, a variety of terms are adopted to describe concepts and processes. Even if these issues are usual in an emerging and developing field of research, the analytics field is now at a point where clarification and consensus are needed (Van Barneveld, 2012).

Furthermore, short attention has been paid to adopt analytic frameworks to improve students’ active participation even though their involvement seems to have a large impact on their success (Bach, 2010). In fact, the field of LA has the potential to enable higher education institutions to increase their understanding of their students’ learning needs and to use that understanding to positively affect student learning and progression (Slade and Prinsloo, 2013). For these reasons, we propose to build a framework of reference for LA in the University domain with the definition of sources, data, and actors that could be involved.

In the following sections, first we investigate the concept of LA, in particular with regard to definitions, elements to be considered in the analyses, obstacle and models. Secondly, we present the research gap. Discussions and conclusions are drawn in the last part of the paper. Implications for practitioners are also discussed.

Learning Analytics: a rationalization

A LAs intervention is described as the surrounding frame of activities through which analytic tools and data are taken up and adopted; it is a soft technology that involves the orchestration of different procedures. For this reason, existing research on LA focuses on different elements (Table 1).

Firstly, some scholars explored LA definitions and their possible stockholders. LA and academic analytics are considered synonymous by Back (2010) with a focus on learner and courses. Attention to both learner and instructor is instead given by Campbell and Oblinger (2007), who considered LA as data derived from statistical techniques and predictive modelling to help faculty in determining students who may face academic difficulty, allowing them to succeed. Additionally, LA, intended as the measurement and reporting of data about learners, have been advocated as a support tool for instructor regulation when adopting a collaborative learning teaching approach (Van Leeuwen, 2015).

Table 1. LA definitions and actors/structures

Definitions	Focus on
LA and academic analytics are synonymous. The use of analytic techniques to help target instructional, curricular, and support resources to support the achievement of specific learning goals (Bach, 2010)	learner and courses
The measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs (Ferguson, 2012, Khalil and Ebner, 2016).	learner and institution
LAs as the measurement and reporting of data about learners, has been advocated as a support tool for instructor regulation of collaborative learning (Van Leeuwen, 2015)	learner and instructor
LA as data with statistical techniques and predictive modeling to help faculty and advisors in determining which students may face academic difficulty, allowing interventions to help them in succeeding (Campbell and Oblinger, 2007)	learner and instructor

In the general field of LA, academic analytics are related to the idea of providing actionable intelligence to identify strategies for the improvement of teaching and learning in higher education (U. bin Mat et al., 2013).

Obviously, academic analytics improved with the advanced application of computing; it can be observed that Universities implemented academic analytics in the late 1990s. Nevertheless, student data collection started in 1960s and earlier, then data base management developed in 1970s (Olmos and Corrins, 2012)

There are different opinions about the meaning of academic analytics. Some scholars (U. bin Mat et al., 2013; Aljohani and Davis, 2012; Goldestain, and Katz, 2005) considered academic analytics as a new way of applying business intelligence in academic domains to provide data with the emphasis being on institutional, regional, and international levels; other scholars (Huda et al., 2017; Maselena et al., 2018) thought academic analytics mainly focused on the improvement of organizational processes, workflows, resource allocation through the “use” of learner, academic, and institutional data. Detailed definitions and actors/structures are described below (Table 2).

Table 2. Academic analytics: definitions and actors/structures (van Barneveld et al., 2012)

Definitions	Focus on
“Focused on academic issues, primarily student access, affordability, and success.” (Norris et al., 2009)	Learner
“The imperfect equivalent term for Business Intelligence, which [essentially describes] the use of information technology to support operational and financial decision making.” (Goldestain, and Katz, 2005)	Institution
“Marrying data with statistical techniques and predictive modelling to help faculty and advisors determine which students may face academic difficulty, allowing interventions to help them succeed.” (Campbell and Oblinger, 2007)	Instructor Learner
“Mining data from systems that support teaching and learning to provide customization, tutoring, or intervention within the learning environment.” (Campbell, 2007).	Instructor Learner
“A process for providing [higher education institutions] with the data necessary to respond to the reportage and decision making challenges facing contemporary universities.” (Dawson et al., 2008)	Institution Courses
“LA can refer broadly to data-driven decision making practices for operational purposes at the university or college level, but it can also be applied to student teaching and learning issues.” (Baepler and Murdoc, 2010)	Institution Instructor Learner
“The interpretation of a wide range of data produced by and gathered on behalf of students in order to assess academic progress, predict future performance, and spot potential issues.” (Johnson, et al. 2011)	Institution Learner
“To enable teachers and schools to tailor educational opportunities to each student’s level of need and ability.” (Johnson, et al. 2011)	Learner
“It might be used as well to assess curricula, programs, and institutions.” (Johnson, et al. 2011)	Institution Courses
“The collection and analysis of usage data associated with student learning; [to] observe and understand learning behaviours in order to enable appropriate intervention.” (Brown, 2011)	Learner
“The use of data and models to predict student progress and performance, and the ability to act on that information.” (Olmos and Corrin, (2012)	Learner

“Academic analytics focus on the improvement of organizational processes, workflows, resource allocation, and institutional measurement, through the use of learner, academic, and institutional data.” (Huda et al., 2017)	Institution Learner
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In these definitions, learners are usually considered “passive actors” or, mainly, “sources of data” in data collection even if there is a growing learners’ demand for active participation to enhance their learning (Gašević et al., 2015). In fact, it is important to actively include learners in LA processes because they can facilitate learners’ understanding of their learning process and, at the same time, enable instructors:

- to tailor educational opportunities to students’ need;
- to provide effective interventions (Lu et al, 2017).

One of the more well-known example of how student data can be used to enhance learning is the “Course Signals” application, that has been implemented at Purdue University. Course Signals is a “student success system” that identifies performance and behavioural problems and informs students that recommended actions are needed to help them achieving their full potential in a course and minimise course failure (Arnold, 2010).

Secondly, research has pondered elements that must be taken into consideration when conducting LA studies. In such regard, Greller and Drachsler (2012, p. 43) define six elements that must be considered “to ensure appropriate exploitation of LA in an educationally beneficial way”:

- Stakeholders: those who are involved in or impacted by analytics
- Objectives: analytical analysis aims
- Data: data sets and sources
- Instruments: tools and technologies
- External limitations: ethical, legal, managerial/organizational
- Internal limitations: a bounding element to the analytics process concerns the need for multiple areas and profiles of experts in analytics projects.

Thirdly, more recent analytics models about LA have been developed by numerous scholars (Clow, 2013, Clow and Makriyannis, 2011, Wolpers, et al., 2007, de Freitas et al., 2015, Buckingham et al., 2012). The Learning Analytics Models (LAM) (de Freitas et al., 2015) is one of the most frequently used model in LA domain. Its elements include: the developing of a LA strategy, the creation of an infrastructure for big data integration, learner-centred services, dynamic look at the students’ learning journey (eg, admissions, enrolment, retention, graduation and employment), adaptively model user behaviours, rigorous view of ethics, external as well as internal review and cross-validation processes. On the contrary, the learning analytics model proposed by Clow was cyclical and included learners, data, metrics and interventions (Clow, 2013).

Other models are mainly oriented on tracking behaviours, persistence, achievement (Macfadyen and Dawson, 2010), attention metadata (Wolpers, et al., 2007), participatory and peer learning (Clow and Makriyannis, 2011) and social LA (Buckingham et al., 2012). Anyway, these studies continue to heavily derive from traditional models (Siemens, 2013). As illustrated, there is a big range of LA frameworks employed across the higher education domains, each affording insight into the various dimensions and factors shaping LA. However, to date, the conceptualisations of these frameworks aspire to be completely realised, and LA implementations across higher education organizations are typically immature, small in scale, and with limited ability to demonstrate institutional impact (Colvin et al, 2015). Finally, obstacles in LA are often related to data sources and management: once data have been collected, they need to be cleaned and turned into an appropriate format for analysis (Jagadish et al., 2014).

From a technical point of view, idealized datasets probably remain the biggest challenge for analytics. This is to say that the assumption that datasets contain context-free, meaningful and only meaningful data, is highly optimistic. Big sets of data and data collected from diverse sources, with distinctive standards and from users with different levels of access, reveal an important challenge presented by incorporating data analyses into strategic planning. Universities have deployed predictive modelling not only to examine learners in the classroom, but also predict course and resource utilizations, provide management to identify at-risk students, and make decisions about resources allocation and other decision-making and planning strategies at institutional level (Mattingly, et al, 2012). In natural settings, practitioners “pollute” databases by creating incorrect or incomplete datasets (Greller, Drachsler, 2012). The number of potential data sources continue to face Universities, attempting to bring analytics to scale. One scaling problem is in extracting, transforming, and using data (for example, LMS data). Data are abundant and usually easy to extract, but they need to be turned into useful information (Van Barneveld et al., 2012), that is the crucial issue when designing an LA institutional strategy. Another current issue is that the information provided by LA is not generally aligned with instructors’ requirements for the management of learning activities (Mor et al., 2015).

Furthermore, in most basic analytics projects, multiple efforts and skill sets are needed (Siemens, 2013).

Learning Analytics processes: the existing gap

As it is evident, no complete agreement exists on definitions, elements to be considered, obstacle to face and models to be adopted. The lack of a common adaptable architecture causes troubles, both for institutional collaboration, setting an agenda and for the teaching and learning improvement.

The charge to Universities is to determine what data can support the improvement of teaching, what actors have to be involved and at what level (Mattingly, et al, 2012). Furthermore, there are few considerations about students as “active” participants in LAs analyses (Gašević et al., 2015).

For these reasons, we strongly support the hypothesis of the creation of an adaptable structure of LA in which the student’s role is “integrated” in it. Students will be viewed not only as the “source” of data, but they will be part of an interactive approach to explore their views and ideas about LA (Piotrkowicz, 2017).

Actually, thanks to LA outputs, students can be encouraged to take personal responsibility for their personal situations - making use of the feedback available about what they're doing, and making proper decisions about support.

Another key concern is the necessity to utilize the insights gathered from the data to make interventions to improve learning, to generate “actionable intelligence” (Campbell et al., 2007) that informs appropriate interventions at institutional level (Clow, 2013). In fact, from a pedagogic perspective, it remains an on-going challenge to define indicators from the available datasets allowing the evaluation of the learning processes (Greller, Drachler, 2012).

Discussion and conclusions

In our paper, evidence has shown the need to propose an adaptable architecture in order to increase the validity of LAs management in the University domain. The use of analytics in higher education is a relatively new area of practice and research. Universities need to adopt analytics to review works that have been done in the past or to support current study and to give recommendations for the future (Ritiens et al., 2016). Efficient processes about LA need institutional transformation that does not just deal with the technical challenges connected to data mining, server load, and computation, but in the organization of analyses (Scheffel, 2014). So, intra-institutional cooperation is required.

Based on our review of the theory background, it is emerged the necessity to design an architecture where:

- sources of data are clearly indicated;
- all actors are involved at different and well-defined levels;
- data are integrated from multiple sources for improving the accuracy of a student profile and the subsequent personalization of contents.

Biography of each author

Leonardo Caporarello, PhD, Director of BUILT – Bocconi University Innovations in Learning and Teaching –, Director of Learning Lab at SDA Bocconi School of Management, and SDA Professor of Practice of Team and Negotiation. His main research and teaching activities are in the following areas: learning and teaching innovation; international negotiation; reorganizational processes. He has a long and wide experience on designing and teaching graduate and executive education programs, based on traditional as well as blended educational models. Leonardo serves as track chairs in several conferences, and as reviewer for many international journals.

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Manuela Milani is currently academic developer at BUILT – Bocconi University Innovations in Learning and Teaching. She has more than 20 years of distance and online education experience in different roles: previously, she was an online facilitator, instructional technology specialist, learning technology coordinator, and transnational European projects local coordinator. In recent years she delivered many training and professional development activities for university staff and faculty members. Her research aims are exploring the impact of cultural differences on the design of online courses offered by universities throughout Europe. Her publications include several papers on use of technology in higher education, learning design, institutional change models, and media pedagogy.

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NEUROSCIENCES APPLIED TO EDUCATION THROUGH THE TECHNIQUE OF MULTIMEDIA REHABILITATION - CEREBRAL GYMNASTICS PROMOTING IMPROVEMENT IN THE MOTOR, COGNITIVE, AFFECTIVE AND INTELLECTUAL DEVELOPMENT OF THE STUDENT

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ABSTRACT

Neuroscience through the use of new information and communication technologies can improve learning with creative and dynamic strategies. New knowledge will be obtained through the exercise of the mind, that is, using the two cerebral hemispheres through neuroplasticity, in a dynamic, intense and active way. It is important to emphasize that the computer can be used as a means to exercise the mind through different activities and can also be used in pedagogical practices to facilitate learning. It offers alternative ways of working and encouraging students with or without disabilities to develop their skills and potential. The computer can be used to develop a variety of complex activities that allow for the complete development of the brain, awakening many skills that help solve problems by making students learn more from their mistakes. These activities will help students develop self-confidence and improve their creative actions and will be independent.

In general, brain stimulation through Multimedia Rehabilitation greatly improves student learning and affectivity, promoting maturity and independence in the development of activities. The results are fast and visible in the first month.

HOW STUDENTS' CLASSROOM PARTICIPATION VARIES WITH DIFFERENT TIMING AND DURATION OF CLASSES

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ABSTRACT

Timing and Duration of classes in higher education are very important factors for students' classroom participation. Classroom participation refers to the retention of students' attention throughout the class, being responsive, showing positive attitude towards teacher's and peer's comments and learning. The aim of this study was to investigate how students' classroom participation varies with the different timing and duration of classes. The sample comprised of 155 students attending first year to masters' classes of Institute of Education & Research, University of Dhaka. Quantitative data were collected first with structured questionnaire. Then two focus group discussions (FGD) were conducted comprised with each academic year students to collect the qualitative data.

This study finds that students' classroom participation varies with their age, sex, academic year and residential status. 88% students have an impact of timing of classes and 90% students have an impact of duration of classes on their classroom participation. Students can best participate in later morning classes between 9:00 AM to 1:00 PM and worst participation in early morning classes before 9:00 AM and post lunch classes after 2:00 PM. This study also finds that duration of the classes should be between 45 minutes to 75 minutes.

Keyword: Education, Higher Education, Quality Education, Classroom Participation, Timing of Classes, Duration of Classes, Attention, Early Morning Classes, Late Morning Classes, Post Lunch Classes

1. INTRODUCTION

Samia Datta is a very bright university 3rd year student of Criminology and she's been very regular and attentive to her class. She enjoys Professor Habib's class on Criminal Psychology at 10:00 AM in the morning and she's been very attentive and participatory throughout the class. But due to some schedule adjustment of the departmental routine professor Habib had to shift his class schedule 10:00 AM to 02:00 PM. But in this new timing of class Samia seemed to be less participatory and inattentive. Most of the time felt sleepy in the class she despite using the same teaching techniques and approaches by professor Habib.

Anisur Rahman is a Masters student of IER and not very interested in departmental education and study. He's therefore also not very regular in the classroom. He however, never misses a class of Professor Haque's Educational Psychology at 3:30 PM and sometimes also joins classes with other the section. Professor Haque use participatory and discussion based teaching method, always keep his instruction brief and never continue after 60 minutes with a break of 5 minutes between 20-30 minutes.

Did these things ever happen to you when you're attending your classes in universities or still happening? Do you ever considered the effect of timing and duration of classes on your classroom participation? Don't you think if the timing and the duration of the classes are little friendlier your performance in the classroom and even in the exams would be better? I bet you would!

Timing and duration of classes in universities are scheduled without consenting or acknowledging its primary stakeholders, the students. Typical university classes usually start very early in the morning around 7:00 AM to 8:00 AM and continues till 5:00 PM to 6:00 PM in the afternoon. But researches show adverse impact of this timing. American psychologist Abraham Maslow on his famous hierarchy theory of Motivation argued on fulfilling innate human needs and the physiological needs as the first condition of motivation. According to his theory students cannot fully concentrate when their physiological needs (e.g. sleep, hunger, comfort etc.) are not met. Students' physical satisfaction like sleep, hunger, thirst, sanitation must be met to move on to the upper level that deals with learning. Timing and duration of classes therefore, can many a times cause physical discomfort that led to non-engagement of students in the classroom. Physical Environment has been given very much importance in quality and successful teaching learning. Several studies have found emphasizing in environmental factors for effective classroom participation and attention of students. Class Traits (size, emotional climate, interaction norms, class topic related to personal life, student to student interaction, group discussion, etc.) and Student Traits (Confidence, preparation of class, comprehension, of professor's question, interest in subject, interest in peers' comment, class participation) are significantly related to student's classroom participation (Fassinger, 1996). Studies point out that to ensure better quality of education teaching-learning process should be student centric rather than teacher and students need should be given highest priority (Henard & Ringuet, 2008). Timing of classes in educational institutes has always been an underestimated and least considered issue in terms of the student's effective participation in classroom activities and so as the duration of a class. Timing of classes refers to the schedule of class periods and class duration refers to the amount of time budgeted for a specific class. Whenever the planning of classes takes place, there's been a little or no consideration of planning of timing of class and duration with its primary stakeholders, the students. A number of studies show that student's classroom participation have been interrupted for many reasons including environmental factors like timing, class size, sitting arrangement etc. Students are not equally active in all the classes in a day. In some classes they are very much active and participatory, then there are classes students feel tired and again there are some classes they fall asleep. Students have seen to pay less attention in classes after lunch or very early in the morning and when the class duration is so long in higher education. Owens, et al., (2010) found in their study that students falling asleep in classes and they find it very much hard to learn. Even after postponing the school starting time in the morning for 30 minutes falling asleep rate in the classes are still 27% (Wahlstrom et al., 2014; Wheaton et al., 2017). The Centers for Disease Control's recommended classes should not start earlier than 8:30 AM which takes a step in the right direction but does not go far enough as 8:30 AM is still far earlier than the times indicated as optimal both here and in the wider sleep literature (Evan, Kelley, & Kelley, 2017). The research also suggests that students' perception about their class starting time in Higher Education fit well with their optimal working time at 9:27 AM. "As the clock runs forward, students move toward their peak. They reach a neutral point around 9 AM, and then begin to move into the positive performance zone." (Evan, et al., 2017). "The peak performance spell starts around 11 AM or 12 PM noon. This is much later than the beginning of the standard workday. This is also much later than many undergraduate classes start." (Evan, et al., 2017).

Though students' academic achievement and test scores are related with their classroom participation, students' classroom participation is totally different from their academic results. A number of studies have found in areas that deal with timing and duration of classes but they concluded their arguments with students' academic achievements rather students' involvement and satisfaction in classroom activity. These studies are conducted on elementary and high school students and minimal focus on the university or higher education students. Moreover, studies in this area are also not adequate to make a conclusive statement and decision in this issue and there are hardly any related studies in the context of South Asian countries. No such studies have found in related area in the context of Bangladesh. After reviewing a number of literature on effect of instruction length on students' classroom participation and achievements, Patall, Cooper, and Allen (2010) concluded their argument with disappointment because of the poor

number of researches in this area that abstain the researchers to draw a definitive conclusion on how increased class time benefit or affect students' performance (Patall, et al., 2010). Besides, the findings from the Silvia (2007)'s study exposed that the educational institutes have extended their school hour not to increase the quality of education, hence it was a part of the educational system reform with no extensive research. These findings indicate the need to conduct further research in this area for a definitive conclusion. Moreover, the global agenda for education is being set to ensuring quality education which will be accessible to all and this goal is to be achieved by 2030 by all the member states of United Nations. Quality of education does not mean higher test scores and pass rates rather it is students' learning and satisfaction in the learning process and it is only possible when students' active classroom participation can be ensured with proper classroom planning and instruction. Timing and duration of the class are very important factor in this essence and the voice of students, the primary stakeholders of learning process therefore needed to be heard.

This study can help policy planner, curriculum developer, school management and the teachers to plan their class scientifically and keeping students' preference and concern in mind. It can also pave the way for the researchers to further research in this area and bring out the desired fruit to improve the quality of education.

Definitions

Students: Students in this study refer to the pupil both boys and girls of higher education or universities of all academic year including first year, second year, third year, fourth year and masters.

Classroom Participation: Classroom participation refers to the retention of students' attention throughout the class, being responsive (voluntarily participate in question-answers, peer review, raise unclear terms and topics etc.), and showing positive attitude towards teacher and peers comments and being active to learn.

Timing of Class: Timing of classes refers to the schedule of class periods, the time when each single class starts and ends.

Duration of Class: Duration of classes refers to the amount of time budgeted for a specific class.

Purpose of the Study: The purpose of this study is to explore and explain how students' classroom participation with the changes of class timing and duration varies in higher education.

Research Questions:

- i. How student's classroom participation varies with different timing & duration of classes?

2. LITERATURE REVIEW

While talking about student's classroom attention and participation the most important and interesting theory that comes to play is Abraham Maslow's 5 staged Theory commonly called Hierarchy of Need Theory. According to Maslow's Hierarchy of Needs, individuals will not acquire satisfaction of one need level until the lower level needs are met (Villa et al., 1992). When a person has satisfied their needs of the bottom four tiers, they have reached self-actualization (Jarvis, 2005). According to Maslow (Maslow, 1971), before a student's cognitive needs can be met, they must first fulfill their physiological needs. Human conscious cannot attend to all stimuli at the same time, the more information they try to attend at the same time, the less they can pay attention or concentrate. This is the bottleneck theory that describes the limited capacity of paying attention and Broadbent's, Treisman's, and Deutsch & Deutsch Models are regarded as the Bottleneck Model (McLeod, 2008). Broadbent after his famous dichotic listening task argued that out of many stimuli human can attend to a single stimulus only at a time and the selection of this stimulus being processed based on its physical characteristics (Broadbent, 1958). Treisman's (1964) in his Attenuation Theory argued that information are processed in a systematic manner and described a pattern in message processing system that includes analysis of the physical characteristics at the very first, then syllabic pattern and individual word and after that grammatical structure and meaning are processed (McLeod, 2008).

Foster et al., (2013) and Kelley et al. (2015) as cited in Evans, et al., (2017) that teen to young adults aged between 14-24 years old may lose chronic, irrecoverable sleep everyday due to early start of the academic classes. Significant impairment in student's cognition and performance has been found as well as physical and mental health deprivation (Lockly, et al., 2004; Blackmore & Choudhury, 2006). According to the sleep researchers, an average 09 hours of sleep is needed for the adolescents and adults to maintain a sound physical and mental health. People may get used to 06 hours of sleep or less in a day but the brain do need more sleep and cannot function well and it's just like someone who stayed up 48 hours straight after getting 8 hours of sleep on a regular basis (Workshop on the sleep needs, patterns, and difficulties of adolescents, 2000).

Students not getting enough sleep of 8-9 hours lose the ability to remember what they read, listen and inconsistently visualize in the classroom and it becomes very hard for the students to concentrate and learn lessons (Owens, Belon

& Moss, 2010). In a Croatian study by Wahlstrom and his colleagues find that after postponing the class start time slightly (from 8:00 AM to 8:30 AM) students falling asleep in the class are still 27% (Wahlstrom et al., 2014; Wheaton et al., 2017). Möller-Levet et al., (2013) as cited in Evans, et al., (2017), university students academic activities also begin too early in the morning and brings out the same risks as high school students. The biological mechanisms for these risks can be remarkably rapid. Subjects aged between 23-32 years old showed changes in metabolic, immune, inflammatory and stress responses, gene expression, alertness and performance in a single week with less than six hours sleep. Lo et al., (2012) found that students working memory and some other specific cognitive functioning may impair due to sleep disruption. A recent functional magnetic resonance imaging (fMRI) study (Muto et al., 2016 as cited in Evans, et al., 2017) demonstrated that “cortical responses showed significant circadian rhythmicity, the phase of which varied across brain regions. Moreover, subjects (17 men, 16 women; aged 21.1 ± 1.7 y) showed local modulation of cerebral circadian phase in cognitive functions in responses to task-related requirements such as attention and working memory. One aspect of these experiments suggested increased cortical responses sometimes occurred during the period before onset of melatonin secretions, or the wake maintenance zone (WMZ).”

Researcher conducted an experiment in a private school of Rhode Island and they changed the morning start time from 8 AM to 8:30 AM The researchers found that students began to sleep more, tiredness in the daytime decreases, were less likely to miss or be late to their first class, and ate more breakfast (Owens, Belon & Moss, 2010). A very small delay in the school start time in the morning, even 30 minutes delay or so can significantly increase the sleep duration of the students and that can lead to better outcome in class attendance, activeness, less falling asleep in the classes and better academic achievements (Wheaton, Chapman, & Croft, 2016). Later start time of classes in educational institutes can be a possible solution of poorer attention, performance, and memory consolidation for students lies in, as recommended by the Centers for Disease Control and Prevention, the American Academy of Pediatrics, and the American Medical Association (American Academy of Pediatrics, 2014; Wheaton et al., 2015).

Over three years Wahlstrom with his colleagues conducted a study over 9,000 students in eight public high schools in three states. They found that high schools that start more than 60% of the students can obtain eight hours of sleep at night if the school starts after 8:30 AM in the morning. Teens getting less than eight hours of sleep reported significantly higher depression symptoms, greater use of caffeine, and are at greater risk for making poor choices for substance use. Academic performance outcomes, including grades earned in core subject areas of math, English, science and social studies, plus performance on state and national achievement tests, attendance rates and reduced tardiness show significantly positive improvement with the later start times of 8:35 AM or later. Finally, the number of road accidents by teen drivers from 16 to 18 years of age was significantly reduced by 70% when a school shifted start times from 7:35 AM to 8:55 AM (Wahlstrom et al., 2014). The same thing is also applicable for the University students as it also starts very early in the morning and students in universities even get less sleep than the high school students (Möller-Levet et al., (2013) as cited in Evans, et al., 2017). As per the recommendation from the Centers for Disease Control the class should not start before 8:30 AM because 8:30 AM is still far earlier than the times indicated as optimal in both in this study in the wider sleep literature (Evans, et al., 2017). Students reach a neutral point around 9 AM, and then begin to move into the positive performance zone. At around 11 AM students reach the beginning of a long slightly irregular optimal performance plateau and anywhere between 11 a.m. and 1 p.m. would be close to optimal for these undergraduate students (Evans, et al., 2017).

After lunch classes are usually seem very dull and students most often feel tired and sleepy. In a study on Croatian high school students Wahlstrom and his colleagues found that 29% fell asleep in an afternoon class (Wahlstrom et al., 2014). Researchers finds Lecture schedule very important in teaching-learning process. Afternoon students face many difficulties to actively participate and focus on the lectures (Abdullah, Bakar, & Mahbob, 2012). Aftermaths of heavy consumption of lunch have been showed in a number of studies. Craig et al. (1981) found pace and sensory vigilance task based impairment and Smith and Miles (1986a, b) study discovered impairment in paced, cognitive tasks. Students' ability to respond quickly to sensory signals has been found interrupted after eating lunch (Smith & Miles, 1986c). Students' ability to respond quickly to sensory signals and sustain attention has been found interrupted after eating lunch and it's worsen in the early afternoon than late morning due to consumption of lunch (Smith & Miles, 1986c). Tasks that involve cognition and memory that are best performed in the late morning and worse in the early afternoon (Davies et al., 1984). Small nap after consumption of lunch can be helpful to regain energy and concentration (Naitoh, 1981). A rapid change in heart rate, an increase of glucose in blood capillary and many more physical changes take place after consumption of lunch (Christie and McBrearty, 1979). Hypoglycemic state and excitement detention is being evidenced as a result of increase in the blood glucose (Karlan and Chon, 1946). A sudden change in the mood also appears that make the students feel snoozing and more relaxed after lunch (Smith, 1985a). This mood and behavioral change is a result of parasympathetic launch of insulin flow caused by the increased blood glucose (Woods and Porte, 1974). Significant performance detentions after consumption of lunch have been found in studies both .in a laboratory setting (Blake, 1971) and in real life (Hildebrandt et al., 1974). Other researchers have argued that changes in the level of cortisol (Follenius et al., 1982) or serotonin (Spring et al., 1983) are responsible for these effects as cited in Smith & Miles, (1986c). After examining the performance efficiency and mood and the composition of lunch Smith et al. (1988) found that Lunch had a great impact on mood that made students feel more stagnant, limp, Improvident, muzzy, shallow, bored and mentally weak, though the composition of the lunch did not influence this effect. The composition of a meal plays a role to decide the behavioral nature of a

subject. Visual stimuli that presented in the periphery being slowed down as a result of consumption of high starch and high sugar meals. On the other hand, consumption of a high protein lunch was associated with greater susceptibility to distraction from stimuli close to the target. Smith et al. (1988) thus, concluded their argument on a study that protein and carbohydrate composed meals affect different dimension of attention.

Lieberman et al. (1986) identified that those who had fasted since breakfast and then ate a high carbohydrate lunch, had a rise in their plasma tryptophan ratio (the ratio of the plasma tryptophan concentration to the summed concentration of the other large neutral amino acids) regardless of whether the meal consisted primarily of sucrose or starch. This increase in the plasma tryptophan ratio is produced by the carbohydrate triggering insulin secretion, which causes most of the amino acids other than tryptophan to leave the blood stream and be taken up into the muscle. Heim and Keil, (2012); Martens and Wyble, (2010); Stevens and Bavelier, (2012) as cited in Eze & Misava (2017), student's academic performance is highly influenced by the instruction length and used space in between. Again Eze & Misava (2017) concluded that duration of the lecture can impair students' classroom participation and the quality of education if it goes on for long. The bottleneck theory of attention also supports this argument about the limited resource capacity in attention of human (Broadbent, 1958; and Tresiman 1964). After reviewing the bottleneck theory of attention, central resource capacity theory and multiple resource theory of attention researchers concluded that human attention rapidly shift from one stimulus to another (Magill, 2007). From the study of Tresiman (1964), McKeachie (1999), and McKeachie & Svinicki (2006) it can be stated that students' concentration, cognition and their performances are greatly affected by the duration of the lecture. Benjamin (2002) and Wankat (2002) argued that effective human attention span last for 10 to 15 minutes at any given time. Reviewing several other studies Wolvin (1983) have found that most people's attention lapses after ten minutes of passive listening. Davis, (1993) suggested that students cannot be attentive in a similar paced lecture for more than 10-15 minutes and therefore, teachers are suggested to change their pace of lecture in every 10-15 minutes.

Goss Lucas and Bernstein (2005) suggested that teacher should prepare their lesson plan between 15 to 30 minutes which is within students' capacity. Eze & Misava suggested, at least in every 30 minutes of lecture students need a break to concentrate in lessons for a long duration class (Eze & Misava, 2017). From the study of Sikora (2013) and Sousa (1998), it can be noted that the limited human attention span is only last for maximum of 20 minutes in every hour. Schultz and Sharp (2008) analyzed students' classroom attendance, academic results, and run pretest and posttest on students of both classes of 50 minutes and 75 minutes and found no statistical difference in students' classroom attendance and academic performances between two classes. Eze & Misava (2017) described long lecture duration as a threat to implementing effective and quality education. Sousa (1998) discussed that it doesn't matter if students want it or not their brain will shift its' attention in every 20 minutes and Sousa (1998) further argued that in the first 10 minutes of the class students' attention are at the peak. It is therefore wise to take a refreshing break in at least every 30 minutes to regain students' attention to the classroom activity and lessons (Eze & Misava 2017). Special need students can be highly benefited by the additional instruction time but overall more time increases the gap between students' achievement rather than closing it (Cattaneo, Oggenfuss, & Wolter, 2016).

Many researchers have suggested that human attention spans are sensitive to age (Gomez and Ostrosky, 2006). Attention (Lustig et al., 2006; Connelly et al., 1991; Hasher et al., 2007; Carriere et al., 2010; Cheyne et al., 2013; Huddleston et al., 2014) and cognitive functions, including speed of processing, selective attention, working memory, long term memory, and problem solving (Craik and Salthouse, 2008) declines with the increasing age. (Gomez and Ostrosky, 2006) also suggested that adult's attention span are slightly higher than children, young adults and old adults.

Davis (2005) and Freeman (2004) suggested that girls are more motivated than the boys in academic performances. Milić, et al. (2014)'s Croatian study which discovered that girls have more sleepiness in evening classes and boys have more sleepiness in the morning classes. Fassinger described females as more prepared in the class and more focused in the subject matter. They are also very positive in peer reviews and feedback than did the males. (Fassinger, 2016).

Studies have found that the environment, personalities of the instructor and students and perception of peers influenced the students to speak up in class (Abdullah, Bakar, & Mahbob, 2012). Caitrin Blake stated that its teachers' techniques and strategies that create students' attention at the very first place of the class lecture and therefore, they need to plan their classes very carefully (Blake, 2016). Many researchers mentioned instruction time as a very complex issue and suggested that how the time is being spent is more important than the amount of instruction time (Joyner & Molina, 2012). Pennington (2006) stated that lengthening lecture duration cannot change the academic outcome; hence its quality should be improved.

After reviewing the bottleneck theory of attention, central resource capacity theory and multiple resource theory of attention researchers concluded that human attention rapidly shift from one stimulus to another and therefore, teachers should be more plan their lesson plan carefully to keep it flexible, short and brief (Magill, 2007). Eze & Misava (2017) suggested that duration of the lecture can impair students' classroom participation and so the quality of education if teachers continue their classes for long and thus the teachers must design their classes accordingly to accommodate the limited human attention span.

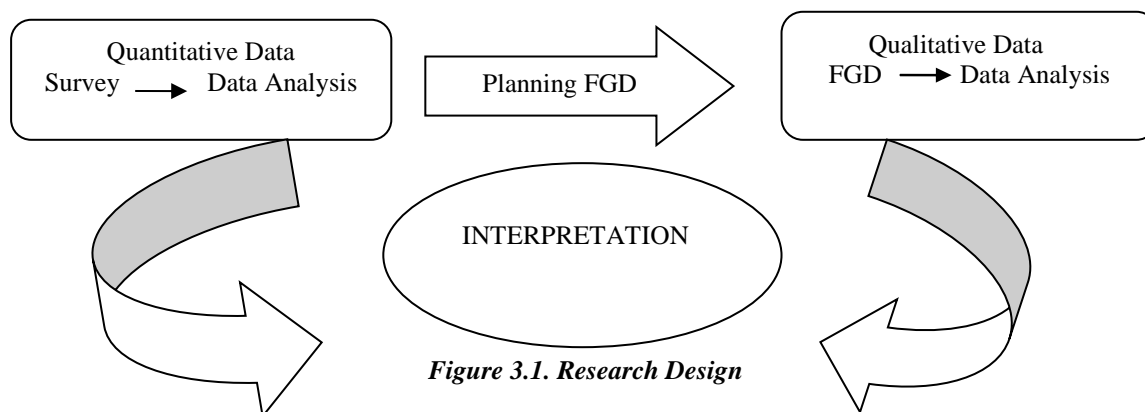
Hafezimoghadam, et al. (2013) described that students enjoy participating the classes most when there's a combination of different approaches. After experimenting different teaching approaches among student groups,

Struyven, et al. (2006) found student-activating instruction more helpful in reducing the sufferings of students' understanding of the teaching content than the lecture based instruction in the classroom practices.

The beginning of the lecture or a class is very much important as it is the key to create students' attention and studies showed that experiment or demonstration method is more useful in attracting students' attention than the lecture method (Veselinovska, 2011). Beydogan (2001) stated that students' capacity to remember can be increased up to 90% by hands-on-experience and Veselinovska (2011) suggested that instructors should start lesson with experiment and demonstration.

3. METHODOLOGY

This is a mixed method study. Explanatory Mixed Method Design has been introduced for this study and both Quantitative and Qualitative approaches have been introduced to collect data.



Purposive sampling technique has been used for collecting data. In this research the researcher has chosen Institute of Education & Research, University of Dhaka's Bachelor, and Masters' students as his sampling participants. Survey method has been introduced to the students who have voluntarily participated. The researcher has conducted survey among 155 students (at least 6 students from each respective year), and 02 Focus Group Discussion of the selected institute. The researcher here has chosen his participants carefully maintaining gender balance and ensuring participation from Hall, Mess & Family living all residential status students.

The researcher used Sequential Quantitative-Qualitative Data analysis technique for analyzing collected data. For Quantitative Data analysis I used the Oneway Anova or analysis of variance technique in SPSS software. Where I found the significant difference I run the Post Hoq test on the following data. For the Qualitative part first I transcribed the messages from two conducted FGD and then conduct thematic analysis approach after coding similar phenomena. Data has been collected using Structured Questionnaire (Quantitative), and Focus Group Discussion (Qualitative).

4. DATA ANALYSIS:

Students' perception about their classroom participation with different timing and duration of classes have been collected and analyzed considering different demographic factors, such as, Age group (below 20 years old, between 20 to 22 years old and above 22 years old), Sex (female and male), Academic Year (1st year, 2nd year, 3rd year, 4th year and Masters) and Residential Status (Hall, Family and Mess) of the students in higher education.

Elaboration of Important Coded Terms

- Q1- Students' perception whether their classroom participation varies with timing of classes
- Q2- Students' most preferable 03 hours' time slot of class
- Q3- Students' most preferable 90 minutes timing of class
- Q4- Students' least preferable 03 hours' time slot of class
- Q5- Students' least preferable 90 minutes timing of class
- Q6- Students' perception whether their classroom participation varies with duration of classes
- Q7- Students' desired duration of classes for University level

Table 4.1

Dependent Variable	Factor (Age)	N	Mean	F	.Sig
Q1	<20	14	1.1429	.231	.794
	20-22	81	1.1358		
	>22	60	1.1000		
	Total	155	1.1226		
Q2	<20	14	2.2857	2.293	.104
	20-22	81	2.6173		
	>22	60	2.7000		
	Total	155	2.6194		
Q3	<20	14	2.1429	2.460	.089
	20-22	81	2.5062		
	>22	60	2.4667		
	Total	155	2.4581		
Q4	<20	14	3.3571	7.542	.001*
	20-22	81	4.5062		
	>22	60	4.6333		
	Total	155	4.4516		
Q5	<20	14	3.0000	1.727	.181
	20-22	81	3.7778		
	>22	60	3.8833		
	Total	155	3.7484		
Q6	<20	14	1.3571	4.397	.014*
	20-22	81	1.0617		
	>22	60	1.1167		
	Total	155	1.1097		
Q7	<20	14	2.5000	1.866	.158
	20-22	81	2.3580		
	>22	60	2.0667		
	Total	155	2.2581		

Age Group Q4

(I) AGE	(J) AGE	Mean Difference (I-J)	Sig.
<20	20-22	-1.14903*	.002
	>22	-1.27619*	.001
20-22	<20	1.14903*	.002
	>22	-.12716	.784
>22	<20	1.27619*	.001
	20-22	.12716	.784

Table 4.2

Age Sex

Dependent Variable	Factor (Sex)	N	Mean	F	.Sig
Q1	Female	77	1.1169	.046	.831
	Male	78	1.1282		
	Total	155	1.1226		
Q2	Female	77	2.6364	.102	.750
	Male	78	2.6026		
	Total	155	2.6194		
Q3	Female	77	2.3766	3.139	.078
	Male	78	2.5385		
	Total	155	2.4581		
Q4	Female	77	4.5065	.336	.563
	Male	78	4.3974		
	Total	155	4.4516		
Q5	Female	77	3.9740	2.999	.085
	Male	78	3.5256		
	Total	155	3.7484		
Q6	Female	77	1.1429	1.359	.246
	Male	78	1.0769		
	Total	155	1.1097		
Q7	Female	77	2.4026	3.125	.079
	Male	78	2.1154		
	Total	155	2.2581		

Table 4.3

Table 4.4

Age Group Q6

(I) AGE	(J) AGE	Mean Difference (I-J)	Sig.
<20	20-22	.29541*	.010
	>22	.24048	.052
20-22	<20	-.29541*	.010
	>22	-.05494	.619
>22	<20	-.24048	.052
	20-22	.05494	.619

The analyzed data from Q1 to Q3, Q5 and Q7 here on Table 4.1, suggests that there's **no significant difference** between student's age and classroom participation in different timing of classes. The p values are greater than .05. But the P value in Q4 and Q6 on age group shows **significant difference**. Students aged below 20 has significant difference with students aged between 20-22 years old and students above 22 years on their opinion of least preferable timing of classes. Also the students aged below 20 has significant difference with students aged between 20-22 years old of their preferable duration of classes.

The analyzed data here on Table 4.2 suggests that there's no significant difference between students' sex and their classroom participation.

Dependent Variable	Factor (Resident)	N	Mean	F	.Sig
Q1	Hall	66	1.1061	.244	.784
	Family	64	1.1250		
	Mess	25	1.1600		
	Total	155	1.1226		
Q2	Hall	66	2.5758	.282	.754
	Family	64	2.6406		
	Mess	25	2.6800		
	Total	155	2.6194		
Q3	Hall	66	2.4394	.182	.834
	Family	64	2.4531		
	Mess	25	2.5200		
	Total	155	2.4581		
Q4	Hall	66	4.3485	.915	.403
	Family	64	4.4531		
	Mess	25	4.7200		
	Total	155	4.4516		
Q5	Hall	66	3.6212	1.042	.355
	Family	64	3.9688		
	Mess	25	3.5200		
	Total	155	3.7484		
Q6	Hall	66	1.1061	1.790	.170
	Family	64	1.1563		
	Mess	25	1.0000		
	Total	155	1.1097		
Q7	Hall	66	2.1212	1.149	.320
	Family	64	2.3281		
	Mess	25	2.4400		
	Total	155	2.2581		

**Residential Status
Academic Year**

**Table 4.5
Table 4.6**

Dependent Variable	Factor (Academic Year)	N	Mean	F	.Sig
Q1	1 st Year	31	1.1613	.977	.422
	2 nd Year	30	1.1667		
	3 rd Year	32	1.1563		
	4 th Year	30	1.1000		
	Total	155	1.1226		
Q2	1 st Year	31	2.5806	.403	.806
	2 nd Year	30	2.6000		
	3 rd Year	32	2.7500		
	4 th Year	30	2.5667		
	Total	155	2.6194		
Q3	1 st Year	31	2.4516	.298	.879
	2 nd Year	30	2.4667		
	3 rd Year	32	2.4688		
	4 th Year	30	2.5333		
	Total	155	2.4581		
Q4	1 st Year	31	3.8387	2.903	.024
	2 nd Year	30	4.5667		
	3 rd Year	32	4.7188		
	4 th Year	30	4.5667		
	Total	155	4.4516		
Q5	1 st Year	31	2.9677	2.894	.024
	2 nd Year	30	3.9333		
	3 rd Year	32	4.2500		
	4 th Year	30	3.8333		
	Total	155	3.7742		
Q6	1 st Year	31	1.1613	.309	.871
	2 nd Year	30	1.0667		
	3 rd Year	32	1.0938		
	4 th Year	30	1.1000		
	Total	155	1.1097		
Q7	1 st Year	31	2.3226	.914	.458
	2 nd Year	30	2.4333		
	3 rd Year	32	2.2813		
	4 th Year	30	2.3000		
	Total	155	2.2581		

The analyzed data here on Table 4.5 suggests that there's no significant difference between students' residential status and their classroom participation. The P value in all from Q1 to Q7 are greater than 0.5.

(I) YEAR	(J) YEAR	Mean Difference (I-J)	Sig.
1 st Year	2 nd Year	-.72796	.098
	3 rd Year	-.88004*	.022
	4 th Year	-.72796	.098
	Masters	-.72379	.092
2 nd Year	1 st Year	.72796	.098
	3 rd Year	-.15208	.985
	4 th Year	.00000	1.000
	Masters	.00417	1.000
3 rd Year	1 st Year	.88004*	.022
	2 nd Year	.15208	.985
	4 th Year	.15208	.985
	Masters	.15625	.982
4 th Year	1 st Year	.72796	.098
	2 nd Year	.00000	1.000
	3 rd Year	-.15208	.985
	Masters	.00417	1.000
Masters	1 st Year	.72379	.092
	2 nd Year	-.00417	1.000
	3 rd Year	-.15625	.982
	4 th Year	-.00417	1.000

Table 4.3
Table 4.4
Academic Year Q4
Academic Year Q5

(I) YEAR	(J) YEAR	Mean Difference (I-J)	Sig.
1 st Year	2 nd Year	-.96559	.121
	3 rd Year	-1.28226*	.013
	4 th Year	-.86559	.205
	Masters	-.90726	.154
2 nd Year	1 st Year	.96559	.121
	3 rd Year	-.31667	.932
	4 th Year	.10000	.999
	Masters	.05833	1.000
3 rd Year	1 st Year	1.28226*	.013
	2 nd Year	.31667	.932
	4 th Year	.41667	.835
	Masters	.37500	.875
4 th Year	1 st Year	.86559	.205
	2 nd Year	-.10000	.999
	3 rd Year	-.41667	.835
	Masters	-.04167	1.000
Masters	1 st Year	.90726	.154
	2 nd Year	-.05833	1.000
	3 rd Year	-.37500	.875
	4 th Year	.04167	1.000

P value in Q4 and Q5 on age group shows **significant difference**. The first year students have significant difference with the third year students on their opinion of the least preferable time zone for classroom participation. Similarly the first year students have significant difference with third year students on their opinion of least preferable 90 minutes class time. The juniors feels more uncomfortable in the early morning classes than the post lunch classes.

Students' perception about their classroom participation with variance of class timing:

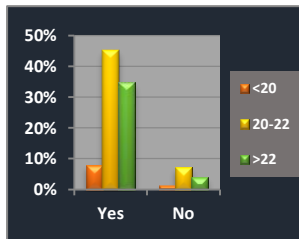


Figure: 4.1

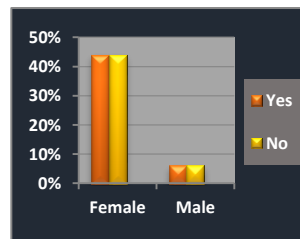


Figure: 4.2

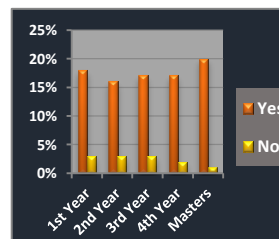


Figure: 4.3

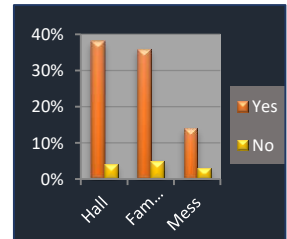


Figure: 4.4

Students most preferred time zone:

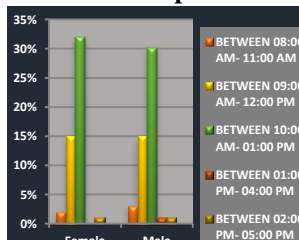


Figure: 4.5

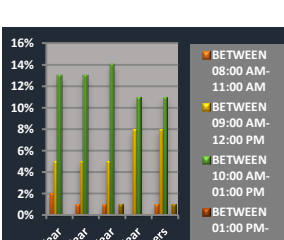


Figure: 4.6

Figure: 4.7

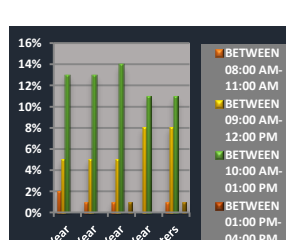
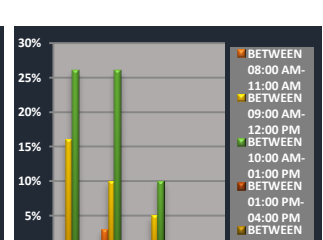


Figure: 4.8



Students' most preferred 90 min class time:

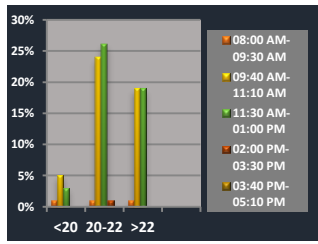


Figure: 4.10

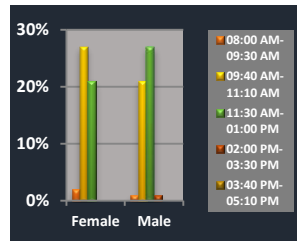


Figure: 4.11

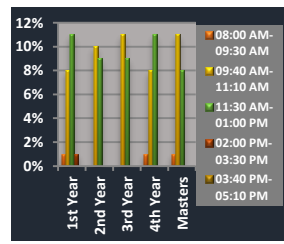
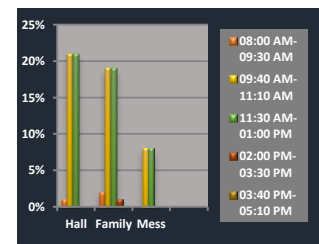


Figure: 4.9
Figure: 4.12



Students least preferred time zone:

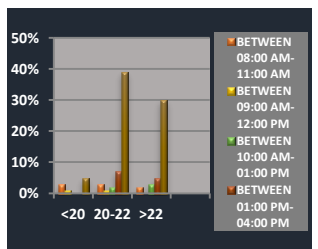


Figure: 4.14

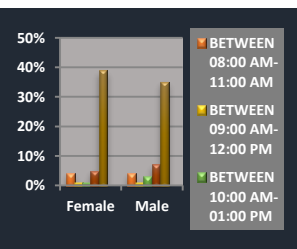


Figure: 4.15

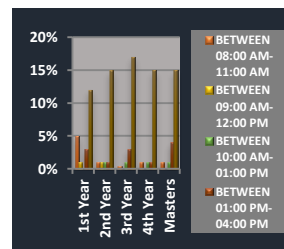


Figure: 4.16

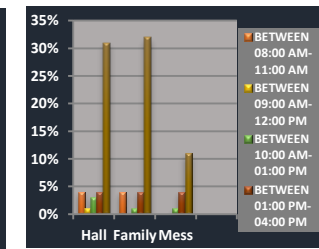


Figure: 4.13

Least preferred 90 min class time:

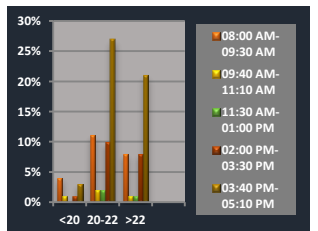


Figure: 4.18

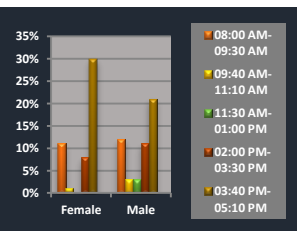


Figure: 4.19

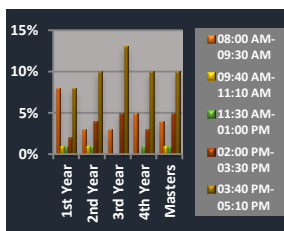


Figure: 4.20

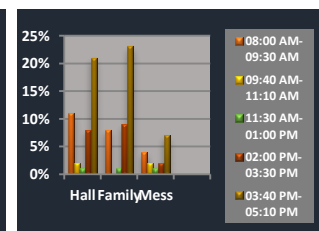


Figure: 4.17

Student's perception about class duration:

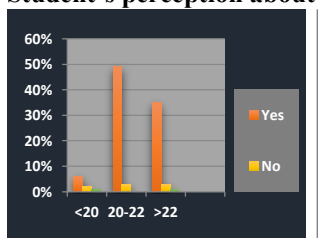


Figure: 4.21
Figure: 4.24

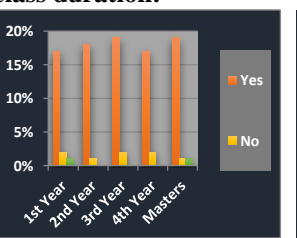


Figure: 4.22

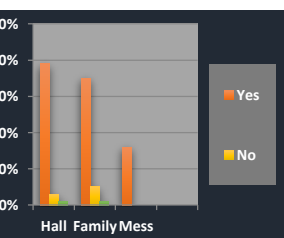
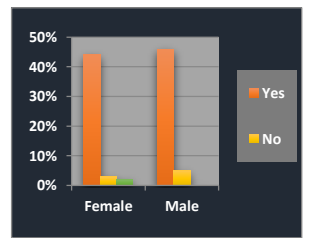


Figure: 4.23



Most preferable class duration:

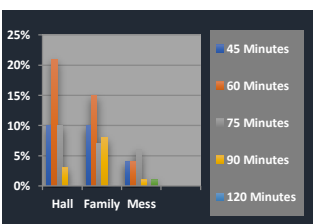
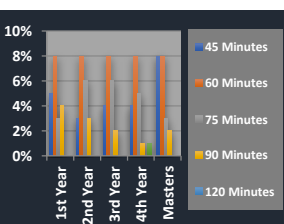
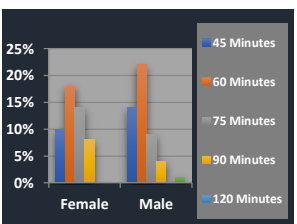
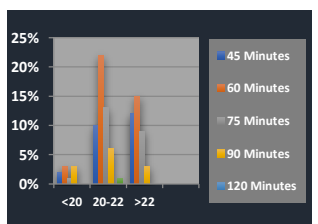


Figure: 4.29

*Figure: 4.30**Figure: 4.31**Figure: 4.32*

5. RESULTS AND DISCUSSION

This study finds that regardless of students' age, sex, academic year and residential status 88% higher education students think that their classroom participation varies with different timing of classes. The study finds that students can best participate in the late morning classes. Classes between 9:00 AM to 01:00 PM are found most preferable and participatory to students and classes starts 8:00 AM or before and post lunch classes are least preferable to the students.

Students fell numb during the classroom lectures at the early morning classes as they still feel sleepy. They had little sleep at night, they somehow just rush to the classes after getting up from the bed. The attendance in these classes always remains very low according to the study participants. Students in university dorms usually go to bed late at night and as a result they cannot wake up very early for the classes scheduled at 8:00 am or before. Most of the time students do not get enough time to have breakfast before the class. On the other hand students comes from homes and messes travel some distance to reach universities and in Dhaka city moving around at any hour is very much time consuming due to heavy traffic on the streets. So they have to start from their homes and messes long before the class to be there in time. And many students cannot have their breakfast before the very early morning classes. Canteens, hotels and restaurants are also not available to provide food sometimes in the early morning. Then the long 90 minutes class with no break in the middle makes the student's morning hunger more acute and this limit student's participation in the classroom activity.

“I come from Basbo Housing and to catch the 8:00 am class in the morning I need to start from home at least at around 6:45 am in the morning. Most of the time I cannot wake up in time and I always in a rush to catch the bus and joining the class and there's no time to have breakfast. And as the class progresses I feel hungry and lose my attention from the class.”

After attending one or more classes before lunch students feel a bit tired and after lunch they fell really sleepy and it becomes more difficult for them to concentrate in classes. Classes after lunch usually start at around 2:00 pm and before that it runs till 1:00pm. There's a one our break for students to have their prayer and lunch and there's almost no time to have some rest and relax. Most of the institutes and departments in universities of Bangladesh do not offer its students with any common room facilities where they can relax in between the breaks and if some institutes does it is not well decorated to take a small nap. People in Bangladesh used to take a heavy meal at lunch and after taking a gravy lunch the body needs rest, which the students cannot get. So, it's obvious they fall sleep in the classroom. Especially when there's a lecture based long class going on.

“After entering the classes of 2:00 pm I find it really hard to concentrate on lectures and anxiously wait to end the class. But it doesn't end that soon and it seems like every seconds turned into minutes and evry minutes turned into hours to me.”

“Lectures after lunch seems like bed time stories to me and the more I try to concentrate and listen the more I feel sleepy.”

Students here who do not live in the university dorms which is more than half of the total students usually use University Transports (Bus) and local transports (Bus, Rickshaw, Car, CNG etc.) to reach their destination. University transports (e.g. Bus) maintain a scheduled time and place for picking up and dropping students. The drop off service in this university usually starts after lunches and the last bus start from the station at 5:00 pm in the afternoon. So, the students attend classes after lunch and especially between 3:00pm to 5:00 pm keep watching the clock and eagerly waiting for the class to end so that they don't miss the bus. That makes the students inattentive and less participatory in the classes after lunch. Again Dhaka city is the city of Traffic Jam and the city streets become more hectic after 4:00 pm in the afternoon as all the offices, factories and schools end at around that hour. People in Dhaka city finds it difficult to reach their destination in desired time. Students, therefore, try to set out for their destination before the Jam hour starts and that sometimes results in their absence and inattention to the class.

“I've my bus at 5:00 pm and my class ends at 5:10. So, I've no other way but to walk away from the middle of the class and all the time I have been hoping to finish the class before time. I can never concentrate in the class with the thought of catching the bus keep popping inside my head.”

Students of higher education in Bangladesh do not always depend on the financial support from their parents and try to make money to manage their personal expenses. As a result they have to manage part time jobs for covering their educational and personal expenses. Many students have to manage their own expenses with that money and get no help from home. And again there are some students who not only manage his/her own expenses but also send some money to home. Most of these part time jobs and tuition times are set after lunch or afternoon. Therefore, it's become very hard for them to concentrate in classes having this in mind that they have to go to tuition home and also prepare for it after the class. They even have to miss some important classes scheduled at afternoon.

“I give extra tuition to an O level student where I've to go four times a week at around 5:30 pm in the afternoon in Uttara which is about 17 KM far from hall and it takes at least two hours from here by bus. So, I need to start at around 3:30 pm from here and to do so I often bunk my classes. Sometimes I need to go to my tuition home straight from my classes and I've no time to get prepare for it. So, I take preparation in the middle of

the classes that make me inattentive and less participatory in classroom activities”

The class duration however, is also a great factor to making an impact on higher education students' classroom participation think 90% of the students. This study finds that 87% (45 Min: 24%, 60 Min: 40% and 90 Min: 23%) students prefer their class duration in between 45 minutes to 75 minutes. Students don't want their classes to run for a long time and also not very less that it cannot cover the topics. However, the class duration should not be more than 45 minutes to 60 or maximum 75 minutes they suggested and make it brief as well as interactive and activity based instead of just lectures. Otherwise it turns out to be a boring session most of the times and students lose their attention from the class. Students of higher education got many other duties and responsibilities apart from their academic responsibilities. Students do social work here, many involve in political movement and many do humanitarian works. Again there are responsibilities to manage finance for own and for their family sometimes. All these roles of students are important and needed to be respected and make way for them to perform these responsibilities smoothly. There should be enough space for them to do these jobs accordingly. Therefore, students suggested their most preferable time to attend classes between 9:00am to 1:00pm and not more than 60 minutes for best learning outcome and best classroom participation. Because at the second part of the day they have to go to places, for their respective jobs like, tuition, social works, and political movements etc.

“I'm the general secretary of Dhaka University Tourists Society. I joined this organization when I was in the first year and with my hard work I have achieved this position. As the GS of the society I've to sit in the office regularly at around 3:00 pm to make important decisions. But my class goes on till 3:30 PM from 2:00 PM for long 90 minutes. As a result often I've to miss classes after lunch. If the class duration was 60 minutes or less I could easily attend both”

This study finds that younger students face more difficulties to participate in the early morning classes than the other age groups. In this study students aged below 20 years old and the 1st year students are significantly behind of the older age group students and senior academic years in actively participation and attending early morning classes. The present study finds that it is more difficult for the fresher in university dorm to attend and participate in early morning classes. During the first year at public universities in Bangladesh, students have to struggle to get a seat in the University Dorm. Students especially boys in the university dorm must go through a political procedure to get a decent accommodation in the dorm. During these days they have to sleep in a very tiny space of a room where many more students are also allocated by the political groups. They have to rehearse political slogans, attend regular programs with political groups, and arrange many events inside and outside the dorms. They hardly have sound sleep in these days and very often miss out early morning classes and if somehow they make it to the class they remain very inattentive.

“We have to rehearse political slogans till late night and after that we have report to our seniors. We finish our rehearsal at around 02:00 am at night and it takes almost 3:00 am to go to bed. I sleep along with 34 other first year students from different departments in a 600 square feet room which makes it very difficult to even move after I lay down for sleep on the floor.”

On the other hand younger students are more patient than their senior ones in terms of participating longer duration classes. Younger students have a lower impact of class duration than their senior ones and as juniors get promoted in higher classes they become more restless and loose interest to participate to longer duration classes. Studies in this area show that attention (Lustig et al., 2006; Connelly et al., 1991; Hasher et al., 2007; Carriere et al., 2010; Cheyne et al., 2013; Huddleston et al., 2014) and cognitive functions, including speed of processing, selective attention, working memory, long term memory, and problem solving (Craik and Salthouse, 2008) declines with the increasing age. (Gomez and Ostrosky, 2006) also suggested that adult's attention span are slightly higher than children, young adults and old adults. This study finds that female students are slightly ahead of the male students in concentrating longer time to the class lectures. This study finding also support the findings of Davis (2005)'s and Freeman (2004)'s study which suggested that girls are more motivated than the boys in academic performances which support this statement. Another finding of this study indicates that female students are least attentive in post lunch classes than the early morning ones and the male are the opposite which is very much related with the findings of the Milić, et al. (2014)'s Croatian study which discovered that girls have more sleepiness in evening classes and boys have more sleepiness in the morning classes. This study finds that students' classroom participation very much depends on the personality of the teacher and their adopted teaching-learning strategies. In many cases students can ignore the timing and to some extent duration of the classes if the teacher is being liked and admired by the students. Teachers' personality trait is a huge factor in classroom participation. There are many times the students just come to join a specific class of a teacher just because of his/her techniques and personality traits that attracts students to his/her class. The class time here however, is not a factor for many students to participate in the class but still there are good number of students who cannot be equally attentive and participatory if the same teacher conducts the same class using same techniques in some inconvenient time slots like very early morning or mid noon after lunch. But almost all students agreed on one thing that class duration should not be very long and teacher should make it brief otherwise students fail to sustain their concentration for so long despite their favorite teacher conducting the class.

“I feel very sleepy in almost all the classes scheduled at 2:00 pm with only one exception of Dr. Nazmul Huq's educational psychology class. I really like professor Huq because he's always smiling and never get upset with the students. Everyone likes him for his personality and his interactive way of facilitation. He also keeps his

classes short and brief and never takes more than one hour.”

6. RECOMMENDATIONS:

Following this study results I would like to suggest a number of recommendations to all the stakeholders in higher education. First, drastic review of the class starting time and bring change in class scheduling in higher education. The starting time of the university classes should not be scheduled before 9:00 AM in the morning and duration of the classes should be between 45 minutes to 75 minutes and ideally 60 minutes. Second, schedule classes between 9:00 AM to 1:00 PM and if not possible, provide enough time after lunch to take rest and reenergized before they go to class. Third, avoid lecture based teaching approaches after lunch classes and adopt demonstration and participatory approaches. Offer short break in at least every 20-30 minutes to retaining students' attention if the class duration is long. Finally, stakeholders especially policy makers and curriculum developer should take necessary measures to conduct more study in this area to especially in primary and secondary level improve the quality of education and make it fun.

Biography

MD Elahi Rawshan is an experienced Inclusive Educator and Researcher with a demonstrated history of working in the non-profit organization focusing gender, disability, research and disaster. He's skilled in Special Education & Inclusion, Early Childhood Development, Disaster Education and Risk Management, Mental Health, Youth and Volunteering Policy and Training. He has completed his Bachelor of Education (B.Ed.) majoring in Special Education and Masters of Education (M.Ed) majoring in Educational Psychology and Guidance from Institute of Education and Research, University of Dhaka. Currently he's been working with BRAC as a Social Inclusion Specialist at the Headquarters. Previously he worked for Centre for Disability in Development (CDD), German Red Cross, Agami Education Foundation, and Bangladesh Disability Foundation. He's been volunteering for Bangladesh Red Crescent Society since 2005 and now serve as the Vice-chair of BDRCS National Youth Commission.

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OPERATIONAL RESEARCH FOR REVITALIZATION OF AFRICAN EDUCATION

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ABSTRACT

Background: Education in Africa faces a problem regarding efficiency, efficacy and effectiveness. As a result, governments have made efforts to overcome the education dilemma concerning the lack of skilled labor in Africa. Although there is some progress across the continent, systems are not regenerating fast enough to prepare young people for a more vibrant future.

Objectives: The goal of this research is to review the statistical results concerning education in African countries, and to discuss a road map toward the revitalization of education.

Method: A new model to Revitalize African Education, towards the global plan 2030-2063 will be introduced. This model is based on the implementation of the operational research approach to improve education policies, activities and identify mechanisms seeking to achieve better results.

Results: The process analysis of the education strategy components depicted that most education systems in Africa face a triple crisis: the scarcity of human capital, low quality, poor integration and inconsistency with the needs of the labour market.

Conclusion: Novel proposals for revitalization of African education are given as follows:

1. Reviewing education and training for transformation in Africa", aims at assisting African countries to adopt a comprehensive approach to their education systems, and to obtain better value for money from education expenditures to prepare skilled graduates for national development.
2. Applying the EDUMOD-Egypt model to revitalize the education in Africa
3. Enhancing Science, Technology and Innovation in African Countries", which aims to ensure that the continent of Africa does not lag behind the Fourth Industrial Revolution.
4. Develop priority sectors such as agrifood, marine science, energy, water treatment, ICT, infrastructure, medicines, nutrition, and green economies. This can be done through national entrepreneurship plans, and

incubators. These sectors will promote science, technology, engineering and math education especially for women.

Keywords: Operational Research, educational Policies, Labour Skills, Innovation

Introduction

Despite the efforts of the international community, education issues in Africa, from the 1990s until now, are looking for solutions (Carnoy and Samoff, 1990), (Davis, 1990), (Haddad & Demsky, 1995), (Kitamura, 2007) and (Unesco report, 2018). These issues touch everyone, personally, professionally, and as citizens of African nations and the world. Nations that are at the forefront of economic and technological progress take pride in their public schools and universities. Many of their leaders have come from humble origins along paths that could not have been negotiated. The commitment of teachers and the contributions of communities ensured schooling to be possible for all, even in the most remote and often soul-searing settings. A community that has no school or a community that loses its school seems to loss of better future. Public schools have been the primary source of education for the majority of students in all nations, especially in those that have been the most successful, no matter what indicator for national success is adopted, whether it is economic strength, cultural sensitivity and tolerance, or enduring peace and civilization.

School has strong contribution to the economy and it is considered the centre of culture and civilization ([Brempong, 2011](#)) and (Report Linker, 2019). It also focuses on community and how profession is built. However, public education in African nations is facing serious crisis and the impact of poverty on education remains due to the lack of employment opportunities for school and university graduates. Among these years, great attention and efforts to identify the significant barriers to education in Africa were reported (Africa- America Institute, 2017), (Unesco reports, 2015 and 2018). These barriers are referred to the direct and indirect costs, local attitudes, health & nutrition, and School location, as well as poor environment, outdated curriculum and poor school management. In addition lack of teaching materials, untrained teachers, lack of national budgetary allocation to education.

Hindrances to education are especially pervasive for female, male from minority ethnic group, unable pupils and kids living in struggle territories. The infrastructure of the education system includes the teaching materials, employment of qualified teachers and providing healthy classrooms etc. The concept of revitalization of education is to provide pupils and adults methods of thinking, imagining and experiences social lives.

In fact assessment of the educational processes and activities in all stages is facing many difficulties, due to the lack of the governance and transparency. The issues concerning education sector in developing countries especially in Africa are complex, it need to be analyzed to find a concrete and implemented appropriate educational policy. It is of importance to follow the student progress during the schooling process. Simply the community requires effective learning to protect the people live. It is worth to mention that until recently, education in Africa remained largely peripheral internationally.

Among the previous years, many countries within the continent have tried to adopt different planes to revitalize their education system. They obtained limited success due to external and internal factors such as the centralization of the political system and poor political resolution and lack of capacity building.

After what is called Bologna process in Europe, the term of "Internationalization of Education" was strongly introduced in Africa. Many African researchers considered it as having the benefits of enhancing networking, teaching and learning, and research. With all the fear of continuing to implement internationalization programs and providing financial assistance to encourage mobility among students, teachers, researchers and intellectuals, this will lead to

brain drain and leave the African continent empty of its technical and scientific cadres which sustains inequality between North - South countries.

In this paper, the challenges that face the African primary education level are reviewed. Attempt to identify and describe the process structure of the education policy pillar using the EDUMOD-Egypt model and the operational research (OR) approach will be presented. A novel proposal for revitalization of the African education will be given.

Methodology

The methodology of our study based on a series of steps as follows:

1.The review methodology in this paper has been described in detail in the previous report (Zaki ewiss, 2018). In brief comprehensive review was made using the available literature database, and the collected articles, reports, essays, and conference proceedings of related topics. This methodology is illustrated in Figure 1

2.Identify and describe the education policy processes using Tree model approach.

3.Implementing Education modelling (Edumod- Egypt) (Zaki Ewiss, 2018) and operational research (OR) approaches to improve the education strategy (Hill, 2015) and (Wayne, 2004). In Table 1, the OR activities and description are given.

Implementation of operation research for improving education

It is known that the operational research (OR) is the application of the methods of science to complex problems. It has a wide application in management. This approach is widely used in education, through developing a scientific model of the system. This model is used to predict and compare the outcome of alternative decisions, strategies or controls. This mathematical regime requires a clear picture about the problem under consideration including all interconnection between the processes involved. In Table 2, the definition and description of the operational research models are given.

A good model must possess the following characteristics:

- New formulation should not have any changes in its frame.
- Assumptions made in the model should be as small as possible.
- Variables used in the model must be less in number, simple and coherent.
- It should be open to parametric type of treatment.
- It should not take much time in finding a solution for any problem.

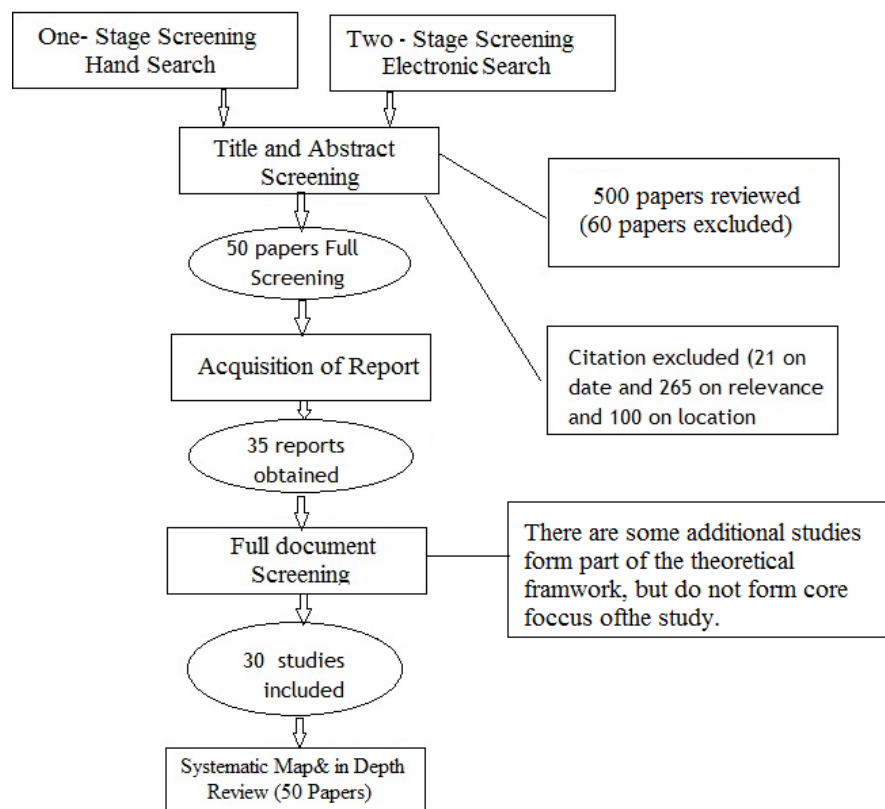


Figure 1: systematic Methodology for data review

Table 1: The activities and description of the operational research model

Activity	Description
Operation	The activities carried out in an organization.
Research	The process of observation and testing characterized by the scientific method. Situation, problem statement, model construction, validation, experimentation, candidate solutions
Mode	An abstract representation of reality.
Systems Approach	Include expectations of the decision-making process during the analysis phase. Factors of quantity and quality are taken into consideration.
Optimal Solution	The best solution provided in the model
Team	A group of people who find solutions for the problem using different skills
Operations Research Techniques	A collection of mathematical and logical methods

The implementation steps of the operations research study are shown in Figure 2.

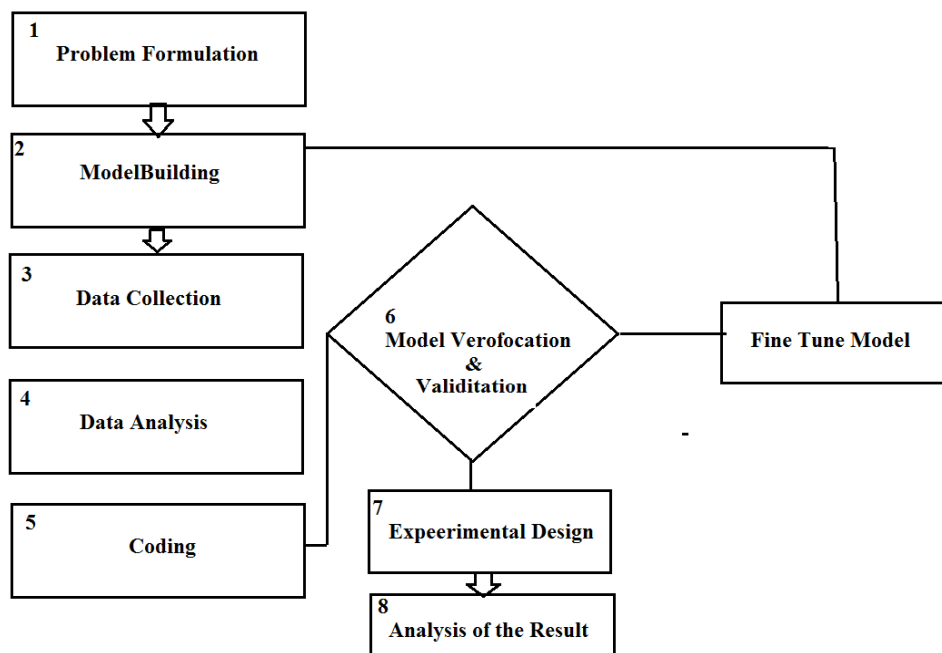


Figure 2: Implementation Steps of the Operations Research Study

Table 2: The definition and description of the operations research models

S. No.	Function	Definition and Description
1	Linear programming	It consists of a single objective function, representing a set of constraints that circumscribe the decision variables.
2	Network flow programming	It is a special case of the more general linear program.
3	Integer programming	It is concerned with optimization problems in which some of the school variables are required to take on discrete values.
4	Nonlinear programming	It is a nonlinear characteristics of the school objective function or constraints.
5	Dynamic programming	It is a different method describes a process in terms of states, decisions, transitions and returns.
6	Stochastic programming	It is a model, generally neglecting the effects of uncertainty and assumes that the results of decisions are predictable and deterministic.
7	Combinatorial optimization	It is a type of optimization problem and compute measures of effectiveness.
8	Stochastic processes	These processes describe the current situation in which the education system can be found.
9	Discrete time Markov chains	It is a probability matrix describing each of the educational activity in one time interval.
10	Continuous Time Markov Chains	It is a process satisfies the Markovian property.
11	Queuing	It is a model which has probabilistic arrival and service patterns.
12	Simulation	It is a technique for estimating statistical measures of complex systems.

Results and Discussion

Studying the review analysis showed that the Major Rationales in African countries are:

- The role of Political and socio-economic in education development
- The continent education context including:
 - Education and governance
 - Decentralization of education system
 - Free primary education policies
 - Teacher recruitment, retention and development
 - education resources
 - Corruption issues in education
 - Education Management

Current Situation

According to the United Nations Sustainable Goal no. 4 for provide education for all by the year 2030, it was noticed that education in Africa has not much progress the challenges remain the same. Although huge efforts have been made to improve education in Africa, still the African education system stands at a crossroad. Referring to the UIS report (Unesco Institute of Statistics (UIS), 2019); the number of enrolled students was increased in most of the African countries. The infrastructure was seriously poor in all aspects including the school live. One finds many unqualified teachers and lack of finance.

Most of the research comments refer to the badly need to train teachers and other instructors and educators. It was estimated for the primary schools that in the next ten years 1 million new teachers are needed (World Bank report, 2018).

Referring to the (World Bank report, 2018)], it was mentioned that the African countries devote a substantial proportion of the government budget to the education sector despite relatively low GDPs and a host of competing development challenges. Increases in government education spending are often to provide a decent education for its young people. It is worth mention that the education quality improvement at all levels is imperative for African development.

It is worth mentioning that the education quality improvement at all levels is imperative for African development. The quantitative and numerical statistical data for the educational system in Africa mainly measure the following parameters:

- a. Number of schools in all education levels
- b. Primary school starting age.
- c. Ratio of student to teacher in primary school,
- d. Male to Female students ratio in basic and secondary school
- e. Preprimary school enrollment,
- f. Trained teachers in primary education,
- g. Total budget,
- h. Rate of Primary school graduates,
- i. Literacy rate including Female and male in the ages 15-24.

Surprisingly since the year 1990 problems militating against the effective implementation of the primary education programme in African are almost remaining the same. Some of these problems are summarized as follows (Unesco Report, 2019):

- ❖ Overcrowded classes, especially in urban areas, due to high school-age population growth and in consequence a very great demand for places even in an expanding school system;
- ❖ The lack of funds, due in a large measure to low government spending on education. This, among other things, imposes severe limits on both the quantitative and qualitative expansion of primary education;
- ❖ Consequent also on the above, the fact that parents are forced to bear an inordinately heavy share of the cost of primary education. This means that the poorest parents do not have enough money to send their children to school, and it raises a problem of equity
- ❖ A low female enrolment ratio of only 45 percent. There is a cultural problem here, in that parents do not see the value of girls' education. Thus girls tend not to be sent to school, and whenever there is a choice to be made (e.g. for financial reasons) it is the girls and not the boys who suffer;
- ❖ Disparities in the location of schools between rural and urban areas; creating problems of the lack of physical access to schools, especially for girls;
- ❖ The poor condition of schools and their infrastructures, which is particularly marked in rural areas.
- ❖ A high wastage rate of 60 percent of the primary school leavers;
- ❖ Over-centralisation, resulting in weak management and weak monitoring and plating;
- ❖ Poor management, or even mismanagement, of the limited resources available for primary education at both school, district and headquarters levels.

African Education for 21st Century Jobs

African society is a youth society; there are more than 200 million young people between 15 and 25 years of age (Unesco Report, 2015). At present, in many countries companies and employers suffer from the inefficiency of graduates from schools and universities. These graduates lack of technical skills, knowledge and inability to act in the completion of their business. For these reasons the rate of economic growth in most of African countries is weak, which is reflected in providing a decent life for the citizens. By the year 2040 it is expected that the striking of the labor force will increase strongly as a result of population growth. Of course this will increase the rate of migration from African countries towards European countries in search of better life. These results are considered a warning to all politicians, experts, educators and managers to prevent the coming dangers of unemployment and the lack of jobs.

Developed countries must provide all technical and technological capabilities and support good education programs, which are the most important sector in this context.

Determination of the education strategy processes

In order to overcome the obstacles facing the development of the education in Africa it is necessary to disassemble the strategic educational plan to its components from the core and the subsidiary processes. The core of education strategy consists of ten pillars namely:

1. Educational Policy
2. Educational Management
3. Educational Economy (Budget)
4. School/University Construction and Equipment
5. Educational Curricula (Programmes & Courses)
6. Educational Teaching Methods
7. Educational responsibilities
8. Educational Human Resources
9. Evaluation
10. Media and Educational Development

To understand the real status of the African educational outcomes, intensive work should be carried out to classify the key educational areas (KEA) including all activities and processes. In a previous report, these education pillars have in total five thousands processes (Zaki Ewiss, 2018). A tree model was suggested to present the pillar's processes, for limited space, samples of the KEA's concerning the educational demand, the educational management, teaching strategies, educational integration between all stages, and the evaluation structure of the education programme in the public schools are shown in Figures 3-7 respectively. The processes of selected activities shown in these figures are structured according to its subsidiary processes as outlined in the previous report (Zaki Ewiss, 2018).

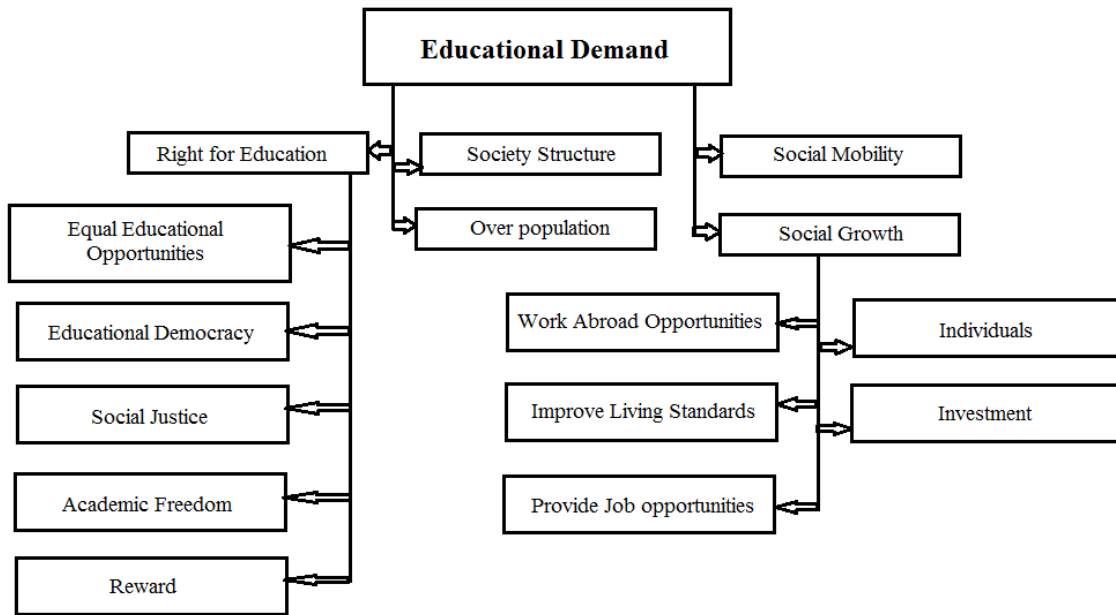


Figure 3: The main processes in the activity of the educational demand

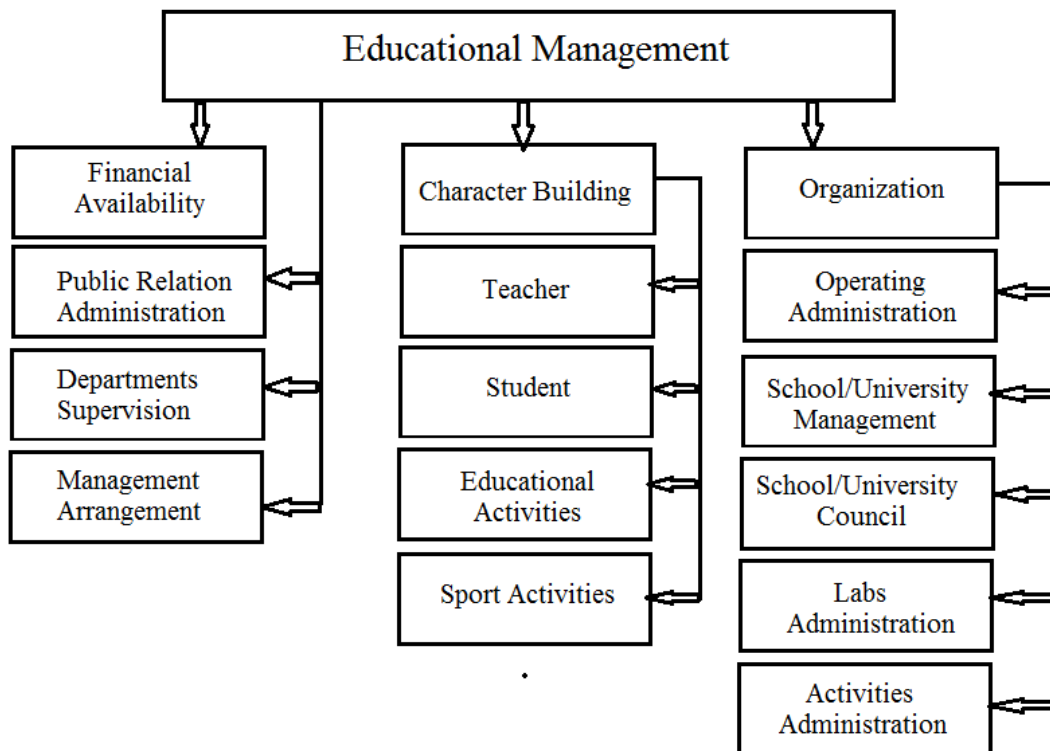


Figure 4: The Educational Management Activities

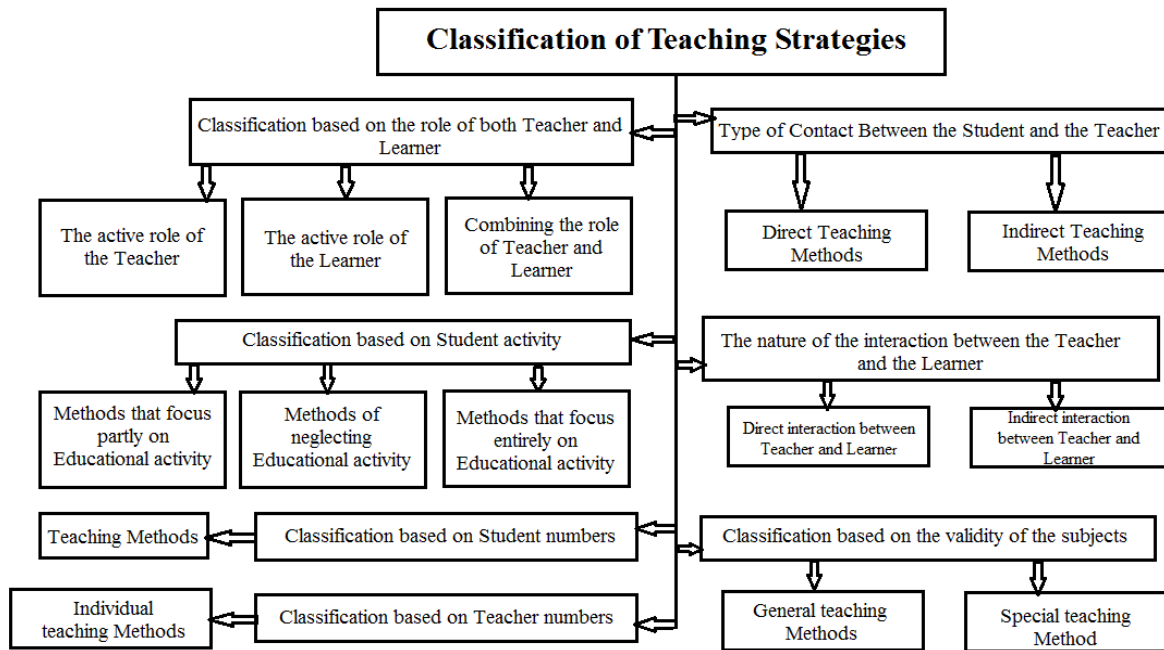


Figure 5: Tree model for the teaching strategies activities in public schools

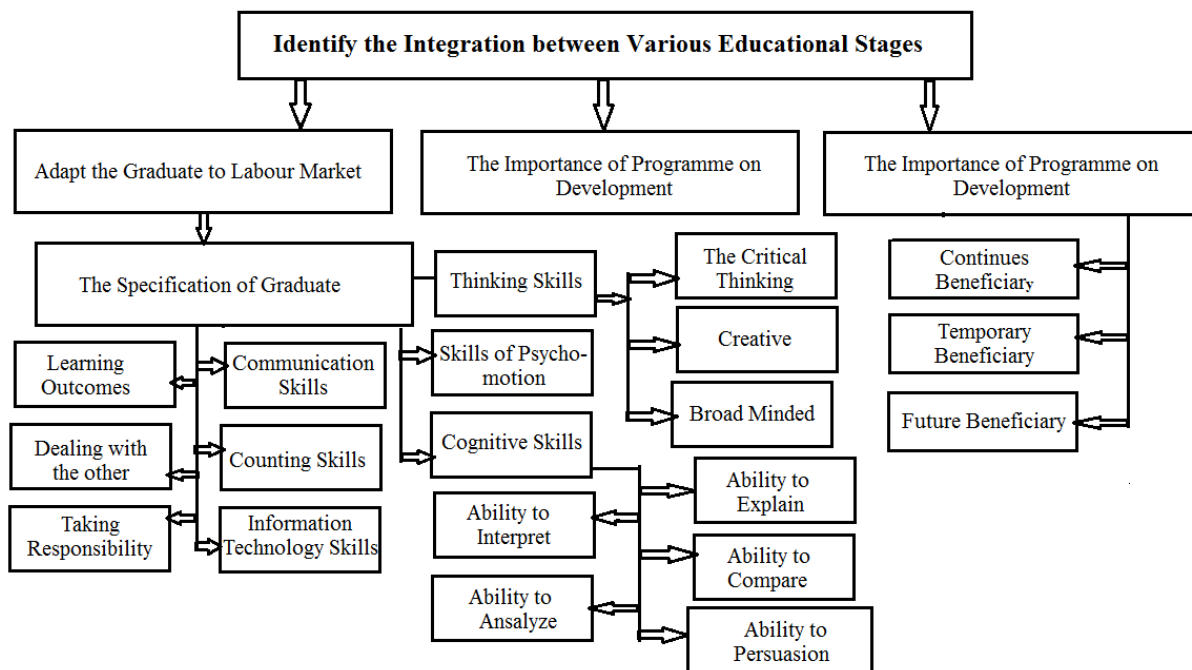


Figure 6: Integration processes between the educational programmes in all levels in public school

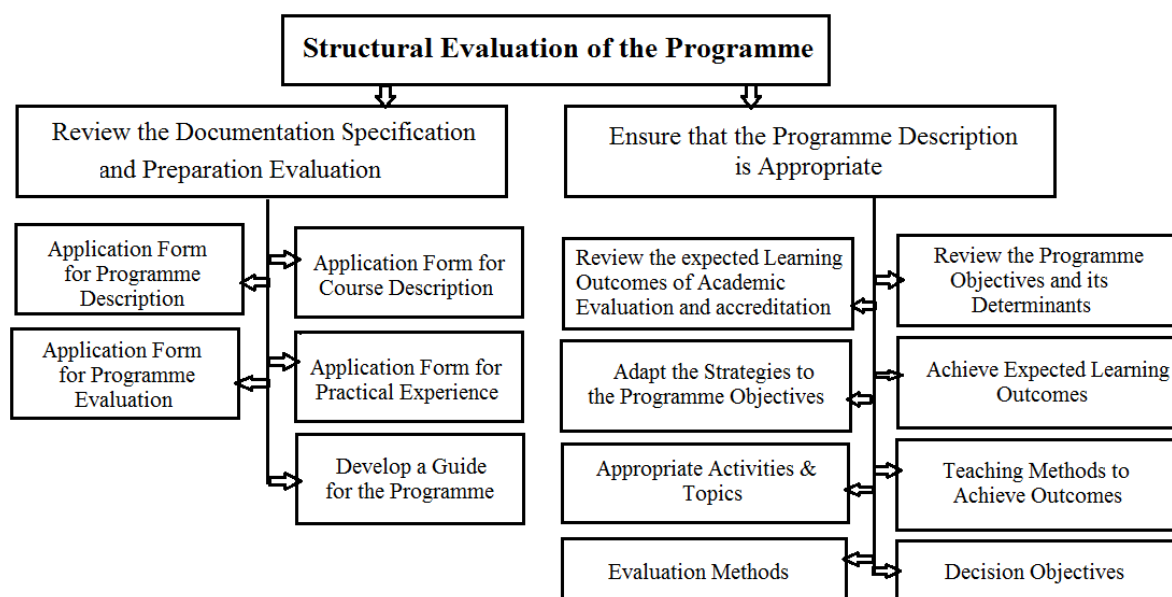


Figure 7: Evaluation processes of the educational programme in public schools

Assessment and Measurement Issues

Unfortunately there is a lack of assessment data in many countries. With great effort intensive quantitative data about the education in Africa was found. This data was collected by UNESCO, UIS and International Bank as mentioned above. It is based mainly on the information provided by the official governmental agencies, the Ministries of education and the institute of statistics in each country. These data covers only about 5% of the total identified processes in all educational pillars. Accordingly, the performance of the educational core structure including the components of all activities and processes are missing. In a previous report the EDUMOD-EGYPT model was introduced to improve education management, reducing the educational waste and diminishing the input errors (Zaki Ewiss, 2018). The execution of this model is based on the selected appropriate mathematical models of the operations research as outlined above. The design of this model requires a valid and reliable data, with clearly analytical measures that can drive all policy changes and consideration. Assessments data to follow the student progress as a person and as a complete class as well as the evaluation of the school performance over time will help to fulfill the education outcomes at all levels. To achieve this goal, the EDUMOD-EGYPT implementation guide should be used by each country to develop an Education Data Platform. This platform consists of a national technical team including teachers, school manager experts and a steering committee of representatives from Ministries, and the national statistical office. Once this platform is established, the concept map of the educational policy will be designed and a proper solution will be proposed.

Conclusion

To improve the quality and use of its data to track progress towards Sustainable Development Goal 4 (SDG 4), it is proposed to establish the EDUMOD –EGYPT agency for Education Planning. EDUMOD is a tool that provides Governments and donors with information that helps in strengthen the capacity of countries to plan and manage their education systems for a better future.

In conclusion, novel proposals for revitalization of education in African are given as follows:

1. Reviewing education and training for transformation in Africa", aims at assisting African countries to adopt a comprehensive approach to their education systems, and to obtain better value for money from education expenditures to prepare skilled graduates for national development.
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IMPROVING TEACHING CAPABILITIES IN DEVELOPING COUNTRIES

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ABSTRACT

Background: Developing countries face a serious problem in education concerning quality teaching and student learning.

Objectives: This paper aims at improving educational teaching capabilities in developing countries

Method: A teaching capability model is implemented to improve the quality of teaching processes. Details about process analysis and discussion are presented.

Results: Educational processes describing the teaching methods and teaching responsibilities are identified and analyzed. The results show that the quality of teaching in developing countries depends on the engagement and development of teachers, students and community. In fact, these three domains should be interconnected.

Conclusion: Practices, skills, knowledge, and attitudes should be applied in order to develop teaching capabilities.

Keywords: Education Quality, Teaching Capability, Learning Efficiency, Lifelong Learning, Developing Countries

Introduction

In developing countries much expectation is stuck on education to yield improved efficiency, monetary development, social advancement and poverty reduction. Be that as it may, for education to convey on these hopes, it must be of adequate amount and quality to prompt significant learning among youths. One of the most significant difficulties is to create a political and social environment for the implementation of an education strategy based on justice, transparency and accountability. Improving teaching capabilities can be achieved through motivating teachers to promote quality of education (Carnoy and Samoff, 1990). Although many developing countries employ policies to change their circumstances, they still make a serious mistake when teaching students skills that are not required on the labor market. As a result, graduates cannot find proper jobs (Haddad and Demsky, 1995),.

United Nations Group of Sustainable development Goal 4 (GSD4, 2015), deems education as a basic human right. However, many children in Africa do not have the opportunity to learn because they suffer from poverty or gender discrimination. There are factors that affect education in developing countries including a lack of funding, weak infrastructure, no qualified teachers, no educational equity and high expenses in all education stages.

Many poor families put their children in school thinking that education may change their children's social status. Education has a key role in helping poor students cope with the economic circumstances of their countries. The community needs to obtain high quality of schooling as a solid economic grantee return for their children, a decline in the rate of students' enrollment at schools may occur. However, governments realize the importance of education in achieving a better life. The process of development should integrate nursery, basic, secondary and university educations to change the dismal economic and social circumstances of the developing countries.

Capability maturity model (CMM) is an analytical method including problem-solving and decision-making. It is essential in the management of organizations. In this sense, problems are broken down into small components, and solved by using mathematical methods. Various resources should be employed to improve organizational performance (CMMI, 2006, Corsi and Neau, 2015).

The aim of the present work is to improve the teaching capabilities in developing countries, using modeling approach. This work is part of the project entitled "Cairo University Proposal to Develop Education in Developing Countries in the Egyptian Context Using Modelling Approach.

Methodology

In this section, the methodology is divided into two parts as follows:

A. Building the new Teaching Capability based on (T-CMM) Model for education development is implemented. CMM helps in describing different levels of maturity for processes within an organization It is used to improve their processes from ad-hoc to disciplined management processes.

B. The review methodology in this paper has been described in detail in the previous report ([Zaki Ewiss, 2018](#)). In brief comprehensive review was made using the available literature database and the collected articles, reports, essays, and conference proceedings of related topics

The Benefits of applying T- CMM in education are the following:

1. Increase of management success including improvements in schedule and cost performance, improved forecasting, product and service quality, satisfaction of customers, productivity, higher return on investment and others.
2. Regarding the return on education investments.
3. CMM can be combined with other technologies including ISO standards and other standards.
4. T-CMM is a tool that improves education management and capabilities.

The CMM model is divided in five well-defined levels (Corsi and Neau, 2015).. These levels are the definition of the problem under consideration (Certainly), the wisdom in treating the operation defect, the Identification and enlightening the resolution of the problem and the efficient treatment of the quality of education.

The T- CMM focusing in the first place on the education strategies. This model also might have consequences on the rest of the supply chain both upstream as downstream (see Figure 1).

Defining T-CMM levels

In Figure 1, an overview of different components of the Capability Maturity Model (CMM) including the Educational Policy, Educational Management, Teaching Capabilities, and Corporate Educational Responsibility is illustrated.

Within different versions of the CMM, different numbers of levels are used. The number of level varies between three and six. Five levels are most commonly used. Based on these five levels, the T-CMM needs to be defined. Within the T-CMM, the level 0 will be used for non-compliance with any kind of regulations. The levels 1 to 5 will be used to indicate the Educational-maturity levels. In Table 1, descriptions of maturity levels in a CMM ([Strutt et.al, 2006](#)).

Table 1: Description of maturity levels in a CMM as used by [Strutt et al](#) (2006)

Level	Stage	Learning Mode	Process Characteristic and Effect
5	Optimized	Adaptive double loop learning	Processes are adapted to optimize product safety
4	Managed	Quantified single loop learning	Processes are quantified and influence product safety
3	Defined	Measured open loop	Processes are defined for safety. There is partial influence on product safety
2	Repeatable	Prescriptive	Processes are standardized, but lack real influence on product safety
1	Ad hoc	Reactive	Processes are not standardized and are largely uncontrolled
0	Violation		

A scoring system indicates the relation between the scores of the different layers after the levels for the topics have been determined. This score system should not give a too negative score since this might de-motivate organizations to perform better education nor should give a too positive score since this might mask serious shortcomings on the topic or activity layer of the model. Therefore, choices need to be made which will be needed to be documented. Decisions should be made and then documented. The definitions of the maturity levels will be applied on the lowest layer (Topic) of the model. The individual scores of the different topics will affect the score for the 'Activity'-layer. The different scores for the activities will influence the score for the Key Educational Areas (KEA's). The three scores for the KEA's will at the end give the final maturity score. The scoring system will be tested on sensitivity by doing several case-studies. Figure 2, shows the schematic relation between different layers of the teaching capabilities according to the T-CMM.

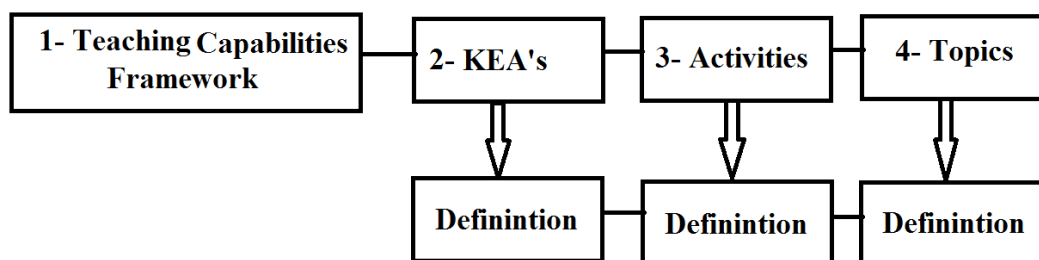


Figure 2: Relation between different layers in the Educational-CMM

Results

Based on the framework shown in Figure 1, ten education pillars are identified. These pillars are the following:

11. Educational Policy
12. Educational Management
13. Educational Economy (Budget)
14. School/University Construction and Equipment
15. Educational Curricula (Programs & Courses)
16. Educational Teaching Methods
17. Educational responsibilities
18. Educational Human Resources
19. Evaluation
20. Media and Educational Development

Case Study: The Egyptian Education Teaching Capabilities

To understand the real status of the Egyptian educational outcomes, intensive work has been carried out to classify the key educational areas including all activities and processes of the educational pillars given above. In total five thousands of educational processes (cover the activities of these pillars) have been identified and described. A tree model was suggested to present the pillar's processes (Zaki Ewiss et al., 2019, Zaki Ewiss, 2018). For limited space, only the KEA's concerning education strategy, educational responsibility, and education resources as well as the cognitive components processes as part of the teaching methods pillar are shown in Figures 3-6 respectively.

In Table 2, some of these processes are listed and described. It is important to evaluate the performance of the above mentioned processes in order to construct the concept map of the teaching capabilities in Egypt. This evaluation should include three aspects: systems (legal institution, educational system, administration, etc.), organizations (Ministry of Education, educational authorities at local governmental levels, school, etc.), and individuals (teachers, school principals, educational administrators, etc). In addition, the financial foundation of the education sector and its surrounding societal environment (e.g., acceptance of, and support to, schooling) must also be taken into consideration.

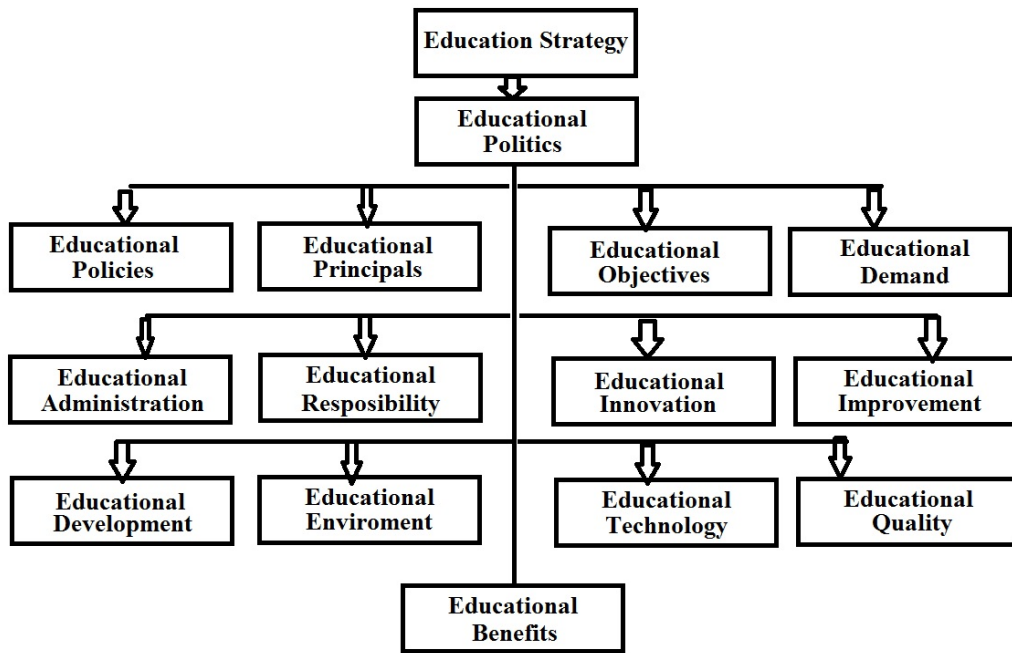


Figure 3: Suggested Tree Model for Educational Strategy

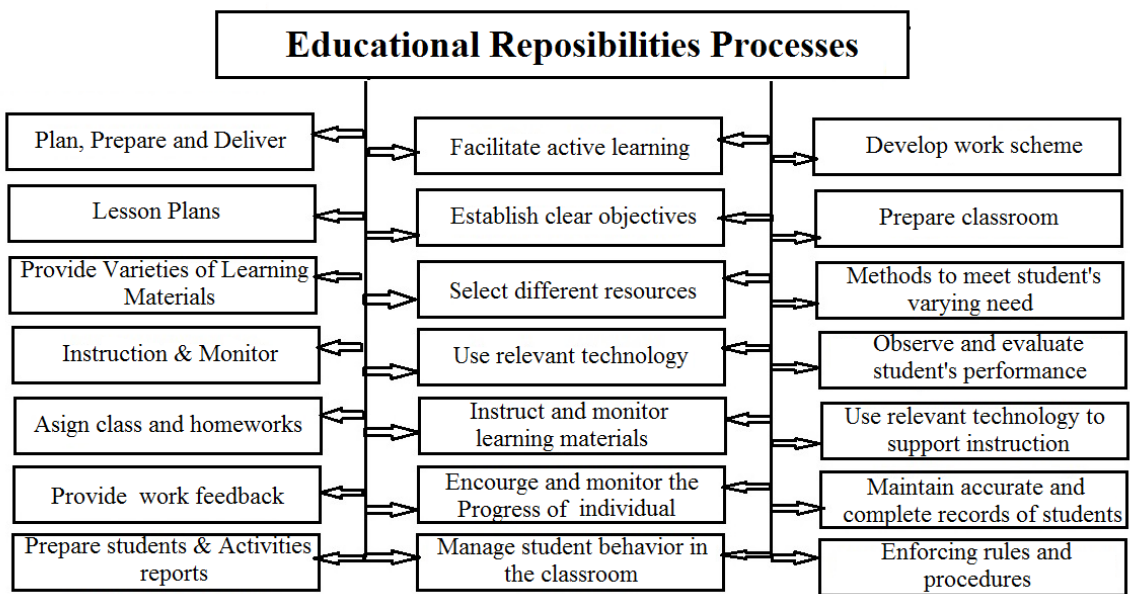


Figure 4: Scheme for the Educational Responsibility processes

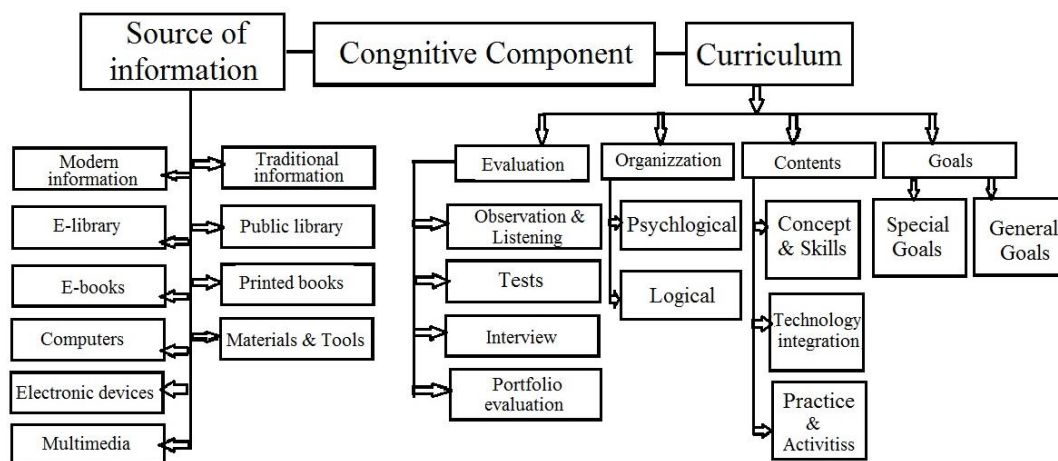


Figure 6: Cognitive components as part of the teaching method pillar

To

improve the teaching capabilities in Egypt a complete picture of the present education status is needed. This picture can be illustrated in a concept map, which reflects the performance of all processes involved in the education pillars mentioned above. The aspects of the quantitative and statistical data of the Egyptian Educational system are reported by the Ministries of education and higher education as well as by many other organizations such as Unesco (Unesco report, 2015 and 2019), OCED (OECD report, 2001), and World Bank (Oseni et.al., 2018, World Bank report, 2006 and World Bank report, 2008). Referring to the available information published by the Central Agency for Public Mobilization and Statistics (CAPMAS, 2017), the population of Egypt is estimated approximately 95 million inhabitants and about 22% of the population is in school age, that is, between the ages of 6 and 17 years old. The system encompasses more than 47,000 schools, some 1.8 million personnel (teachers, administrators and others) and about 20 million students. In Figures 7-10, the number of schools available in all levels, the student distribution (male and Female) in all education stages, the distribution of students per teacher and the number of students per classes are shown respectively.

Table 2: Selected Education Prime Processes

S.N.	Process Name	Process Description
1	Education	Process of bestowing or getting information, mentalities, abilities, or socially esteemed characteristics of character or conduct - incorporates the way of thinking, purposes, programs, techniques, authoritative examples, and so on., of the whole instructive procedure as most comprehensively imagined.
2	Educational Policies	Governing principles that serve as guidelines or rules for decision making and action in the education area.
3	Educational Principles	Values that guide choices concerning instructive strategies or destinations.
4	Educational Politics	Issues concerning the establishment of framework to fulfill the educational activities.
5	Educational Administration	Issues concerning educational management including Planning, teacher and staff affairs,. Supervise financial resources and manage training programs in a healthy educational environment.
6	Educational Responsibility	To provide the necessary commitments to achieve the desired educational objectives to meet the development programs in society.
7	Educational Objectives	Targeted outputs of the educational process within the framework of state policy at all levels.
8	Educational Demand	The desire of society for education.
9	Educational Benefits	Individual gains from access to education.
10	Educational Development	Promote progress in educational systems
11	Educational Improvement	Increase the efficiency of education
12	Educational Innovation	Providing creative ideas in the educational process
13	Educational Technology	The use of modern educational tools such as Internet networks, mobile and computers, as well as visual, audio and electronic presentation tools.
14	Educational Environment	Provide the physical and infrastructure necessary to enjoy the educational process within the school.
15	Educational Quality	Complete the educational process efficiently
16	Educational Resources	Provide financial resources, educational materials, equipment and facilities and prepare students enrolled in education.

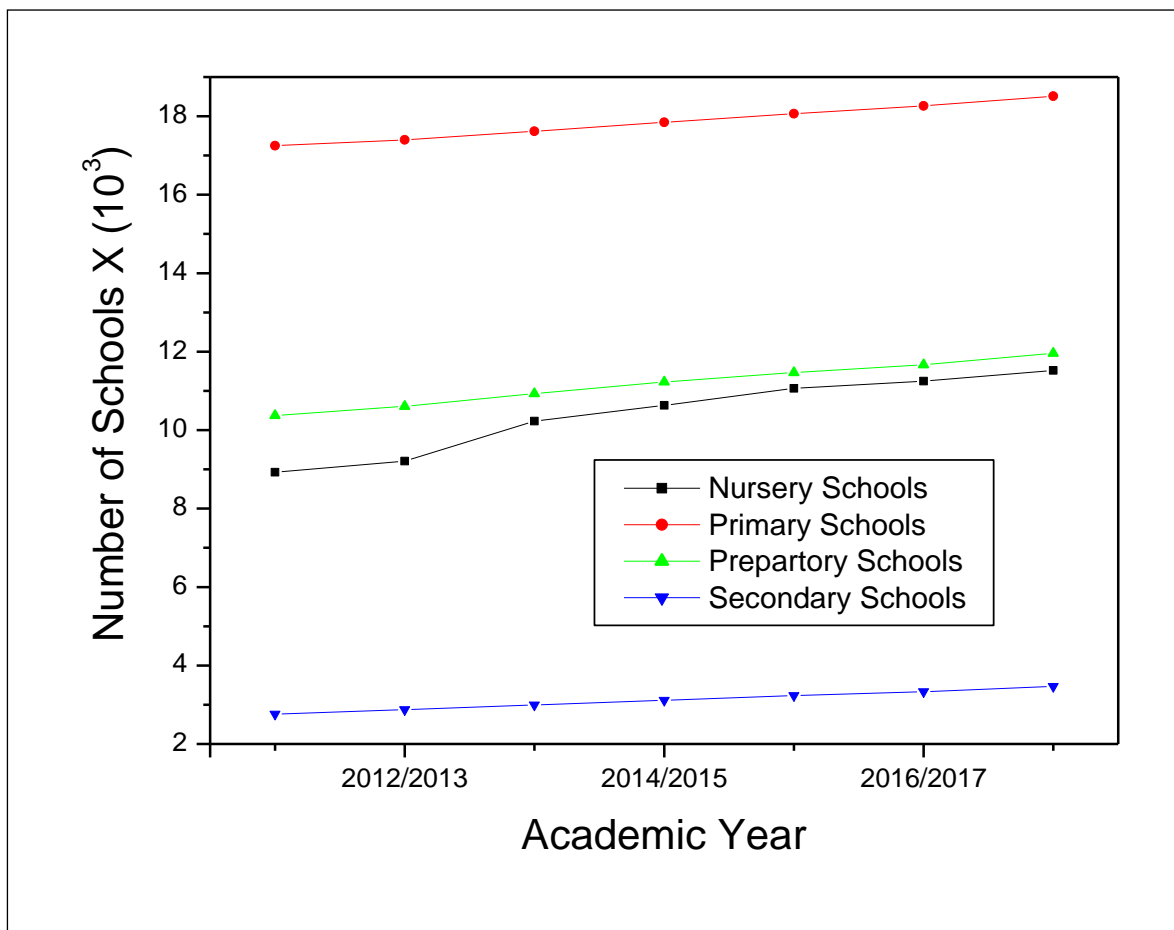


Figure 7: Number of public schools in all educational stages (Data Obtained from CAPMAS 2017)

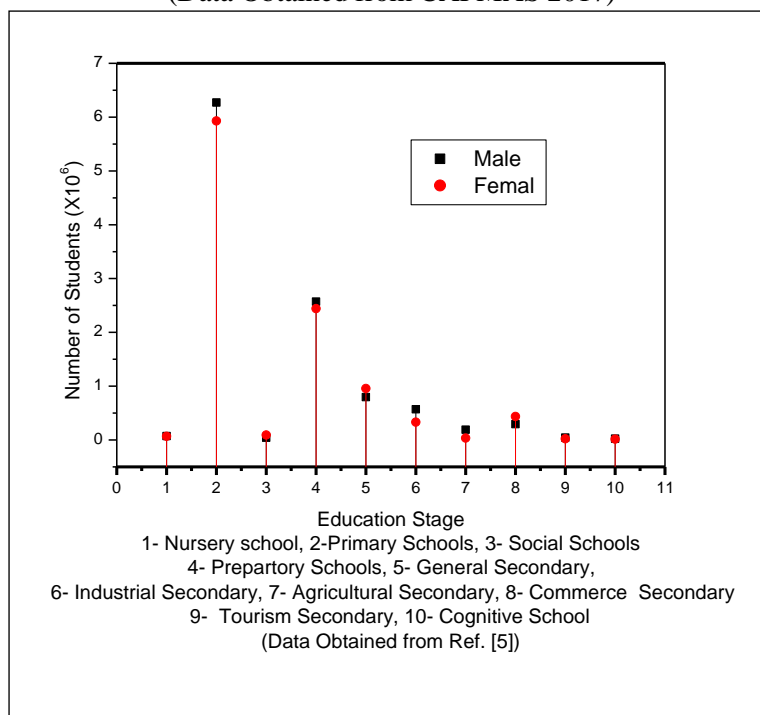


Figure 8: Number of Male and Female students in all Education Stage (Data Obtained from CAPMAS 2017)

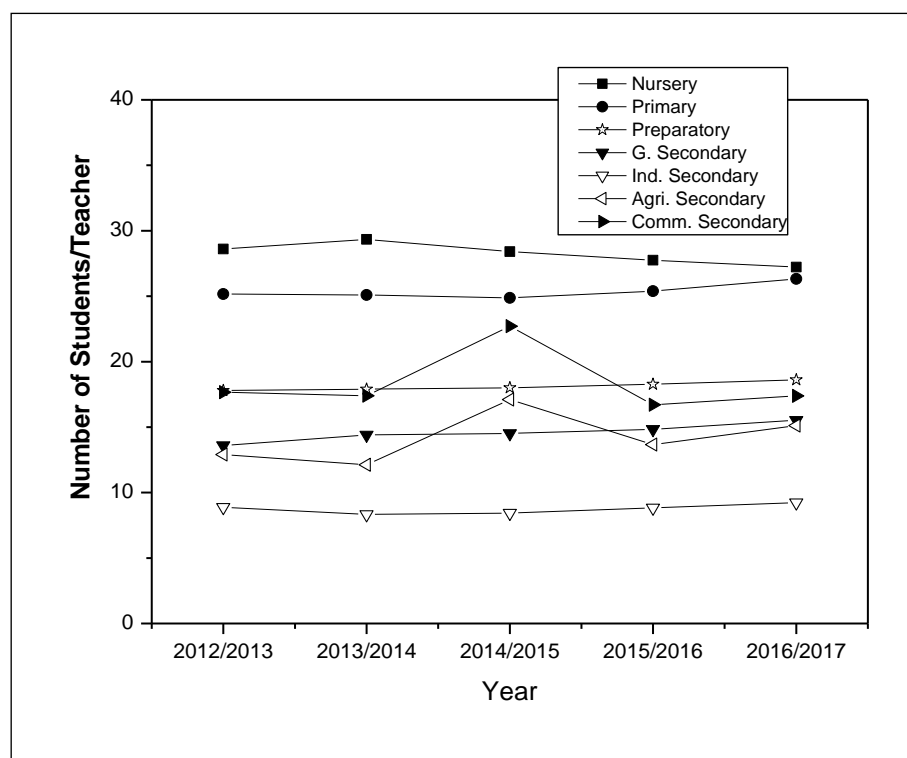


Figure 9: Number of students per teacher in public schools for all educational stages (Data Obtained from CAPMAS 2017)

This information presents only a comparison studies and the rate changes of the education system, From Figure 7, it was noticed that the schools in the primary and preparatory stage equal to 30977 schools and the total number of schools in the secondary and technical schools is equal to 12112 schools. This value represents 39% compared to the total number of schools in the basic education stage. From Figure 8, we found that the total number of male and female students in the primary schools is 12.2 Million students, while the total number of students in preparatory schools is 5.0 Million students (represents 41% of the total students). This means that 59% of the total number of students drops out during the transfer from primary to preparatory schools. Moreover only 6% (about 1 million) students are enrolled in secondary education. Only 8.9 % of the total numbers of female and male students are distributed among the technical secondary schools. This value showed the sever problem to fulfill the requirement of the labour market.

Although the population of Egypt is increased about 10% during the years 2011-2018 (CAPMAS, 2017) it is noticed that the number of schools in all educational stages does not show significance changes (see Figure 7). Moreover, from Figure 9, the ratio of pupils to teachers in primary schools was decreased from 38.0 in 1970 to be 25 in 2018. This value does not reflect the increase of the school class density especially in the rural areas. Similar observations are extracted for the ratio student /teacher and the number of students per class in all educational stages (see Figures 9 and 10 respectively).

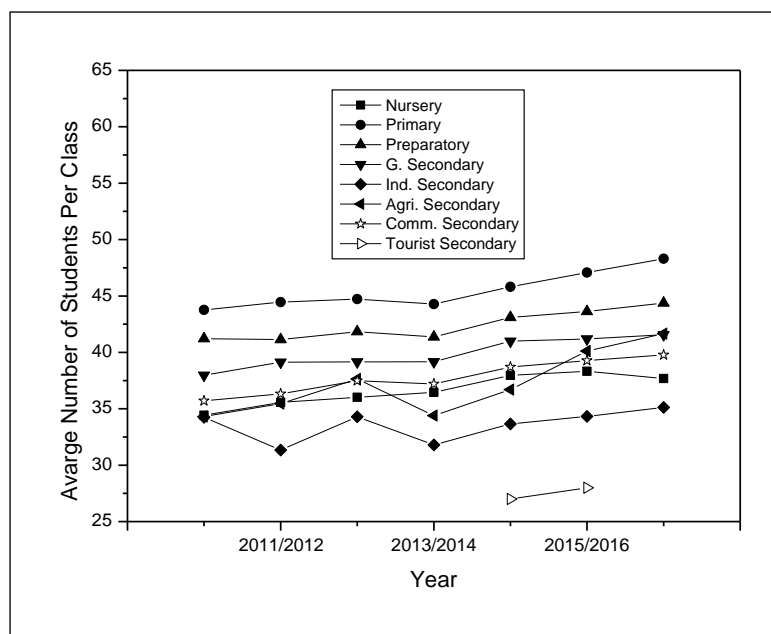


Figure 10: Number of students per class in public schools for all educational stages (Data Obtained CAPMAS 2017)

This official statistics reflects the education crisis in Egypt and in similar other developing countries (Unesco Institute of Statistics (UIS), 2019). This data is insufficient to explain the real situation and the weaknesses of the education system. Unfortunately, data concerning e.g. the school/institutes infrastructure, the teaching quality, education management, evaluation criteria, and university funding including research capacity are missing. In a descriptive report (Unesco Report, 2018) the weaknesses of the education system are discussed.

These weaknesses are attributed to the Centralization of education system, social inequalities, and population growth, rising enrolment rates, limited school classes and low teacher salaries as well as [the curriculum is irrelevant and outdated](#).

To overcome these weaknesses, early in 2018, the Egyptian government has launched an education reform program. This Project is considered as an integral element of the country's sustainable development, (Egypt vision 2030, 2019)

The project objectives are the following:

- a) Improving the infrastructure of the nursery education.
- b) Effective teachers and education leaders.
- c) Providing appropriate measure of the learning outcomes in all levels.
- d) Enhancing education service delivery through connected systems.
- e) Project management, communications, monitoring and evaluation.

Unfortunately, this project was conducted without sufficient studies to identify all the processes and activities. These activities are needed to build the basic pillars of the educational strategy as mentioned above. Although the

application of education technology may be useful in raising the quality of teaching and learning for students, this requires considerable material and technical resources, including the following

- 1) Providing computer equipment for schools and connecting them to the internet efficiently and effectively.
- 2) Establishing the infrastructure of schools and institutions including the technical support.
- 3) Sustaining new models of teaching and learning at all educational levels.
- 4) Adopting new technology-based models of teaching and learning using computer and information technology techniques.
- 5) Convincing the community that new technology-based teaching and learning models are better than current curricula.
- 6) Effective implementation of education technology will increase opportunities for equity rather than widening existing gaps between "people" and "those who do not have."

Discussion

In Egypt, it was found that the civil society does not orient teachers. In addition, governments and donors do not pay attention to the importance of improving learning outcomes. This situation is reflected to other developing countries. Whereas, there is no assessment information about how well students are learning. Furthermore, technical issues are not dealt with carefully. Technical issues lead to lack of distribution in test results across schools, districts, or countries from one year to another.

Educators and policymakers seek to identify effective instructional models by supporting the public schools and supporting external impact evaluations that assess the models' effectiveness. To ensure improvements in teaching capabilities, the educational policy should be structured to include a well-defined model such as the proposed EDUMOD-EGYPT model (Zaki Ewiss, 2018). It is believed that these models will enhance the development of teaching methods, teaching materials, a teacher incentive system, and/or a teacher development process to improve learning outcomes. The proposed model should respond to existing school conditions (e.g. crowded classrooms, poorly motivated teachers with weak skills, teacher absenteeism, etc.).

Conclusion

In conclusion, to achieve the requirements of the processes of all education pillars, the information has to meet certain criteria which constitute the information technology approach. These criteria is provided by Effectiveness, Efficiency Confidentiality, Integrity, Availability, Compliance, Manageability and The information technology resources.

Finally, the improvement of the teaching capabilities in developing countries requires the necessity to construct the concept map describing the performance of all defined processes. Nowadays, taskforce is in progress to achieve these crucial goals.

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Research interest: Material Sciences, Education, Interdisciplinary research, and Environmental Sciences

UNIFIED THINKING PROCESS MODEL: A CREATIVE SYNTHESIS OF PROFESSOR-STUDENT METACOGNITIVE PHENOMENON

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ABSTRACT

The study sought to examine and synthesize a unification of the metacognitive thinking process between professor's metacognitive teaching experience and student's metacognitive learning awareness, which come to light in English Literature classes. Professor's metacognitive teaching experience is a comprehensive understanding of oneself as a learner and professor of English Literature, covering three areas termed as knowledge of oneself, knowledge of the discipline, and knowledge of the learner. Student's metacognitive learning awareness is an emergent understanding of oneself as a learner of English Literature, covering two areas termed as knowledge of oneself and knowledge of the course. Using phenomenological approach that focuses on the study of lived experiences, the research analysis underwent various stages and applied a triangulation of oral and written documents. Resource participants involve professors and students of English Literature in a premier state Philippine university. The study culminates its findings with a proposed unified thinking process model that recognizes the relationship between the professor's and the student's thinking processes. This metacognitive thinking model is a contribution to the field of Educational Psychology. Implications of the metacognitive model in teaching and learning Literature are discussed.

Keywords: metacognitive thinking process, metacognitive teaching experience, metacognitive learning awareness, English Literature

THE DEGREE OF THE PRACTICE OF FIELD EDUCATION SUPERVISORS AND THE COOPERATING TEACHER OF SUPERVISORY SKILLS FROM THE POINT OF VIEW OF STUDENTS OF FIELD EDUCATION AT THE FACULTY OF EDUCATION, KING KHALID UNIVERSITY

MOHAMMED ALMAHFUD
King Khalid University

ABSTRACT

The aim of the research is to know the degree of the practice of field education supervisors and the cooperating teacher of supervisory skills from the perspective of the field education students at the Faculty of Education, King Khalid University. The study tool was applied to a sample of all students of field education for the first semester of the year 39 / 1438H, which included 380 students from King Khalid University, specializing in Sharia and the fundamentals of religion. A sample of middle and secondary schools available for training in Asir region, And [380] students, the research used a questionnaire to reveal the actual performance level of field education supervisors in the Faculty of Education at King Khalid University and the cooperating teacher to answer the research questions:

1- What are the criteria for evaluation of the field education supervisor at the Faculty of Education, King Khalid University and the cooperating teacher? In order to answer this question, the researcher defined the list of criteria for evaluation of the field education supervisor and the cooperating teacher according to specific steps, including access to a number of previous studies and researches in the field of field education, and distribution of the preliminary list of criteria to specialists for arbitration. After the arbitration.

2- What is the degree of practicing the field education supervisor at the Faculty of Education at King Khalid University for the supervisory skills of the two stages (preparation and practice) from the point of view of the students of field education specialization (Sharia and the fundamentals of religion)? The mean of the responses (the sample of the study) for the performance of the field education supervisor for the axis of preparation and preparation in general was (1.87) and to an intermediate degree. At the sub-axes level, the mathematical averages ranged from (2.3) to (1.3). And the mean of the responses (the sample of the study) to the performance of the field education supervisor for the field of practice and training in general amounted to (1.84) and to an intermediate degree. At the level of sub-axes, it is noted that the arithmetic average ranged from (2.3) to (1.3). 3 - What is the degree of practicing the cooperative teacher of the supervisory skills of the stages (preparation and practice) from the point of view of students of field education specialization (Sharia and religious assets)? The arithmetic mean was at the general level (1.90) and the intermediate level. At the sub-axes level, it was between (2.59) to (1.33). The mean of the responses (the sample of the study) to the performance of the collaborator for the training and practice axis in general was (1.93) and to the intermediate level. At the level of the sub-axes, the arithmetic mean ranged from (2.59) to (1.2). 4 - What is the difference between the practice of the supervisor of field education and the practice of the cooperating teacher of supervisory skills from the point of view of students of field education specialization (Sharia and the fundamentals of religion)? The results of the study showed that there were differences with a statistical significance at (0.05) in the two main areas of study (preparation and preparation) and (training and practice) in favor of the cooperating teacher by a simple margin, where the arithmetic mean of the performance of the field training supervisor reached 3.71% Collaborator Teacher (3.83%).

The recommendations of the research:

Based on the theoretical framework of the research and previous studies and the results of the study. Attention to the development of field training, review the functions of the training supervisor and the teacher collaborator to achieve the objectives of field education, and task the supervisor to make periodic reports on the conduct of the supervisory process and submitted by the Field Training Committee In the college.

And the work of training sessions for the cooperative teachers to clarify their roles and supervisory tasks towards the trainee student, and emphasize the importance of communication and constructive cooperation between each field training supervisor and the teacher collaborator to serve the development process of the student Lord.

UNPACKING REFLECTIVE PRACTICE IN THE PRAXIS OF ELT IN INDONESIA

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ABSTRACT

This paper is concerned with the ways Indonesian ELT practitioners review and reflect on their own practice, seek to expand new ideas and practices that they can apply in their own classrooms. The purpose of this study is to bring about and enhance the understanding of what it is actually that Indonesian ELT practitioners are doing, understanding, and more importantly what they are trying to achieve in their classroom activities. This study poses a single explorative question to stimulate an investigative action in the field of ELT in Indonesia: "In what ways are Indonesian ELT practitioners reflective in their classroom practice?" Hence, the context of this study was in Indonesian senior secondary schools and universities especially those located in Banyumas regency, Central Java. This study uses a qualitative approach, utilizing observation, interview and documents as data collection methods, and content analysis as a means of data analysis. Accordingly, this study presents its findings, analysis and interpretation descriptively. The major findings indicate that Indonesian ELT practitioners are reflective in three ways: being reflective within the process of their teaching known as "doing reflection-in-action" (making teaching learning adjustments), being reflective in their post-teaching referred to as "doing reflection-on-action" (making teaching evaluation) and being reflective for their future improvement (teaching planning). Their reflectiveness is aimed at improving the quality of their teaching which, in one way or another, can affect the quality of their students' learning. In this niche, to a certain extent, Indonesian ELT practitioners have indicated the praxis of their language teaching.

Keywords: ELT, reflective practice, praxis, Indonesia

Introduction

As presumably applicable in other fields of study, this paper taps one very salient feature in the domain of English language teaching (ELT) so-called reflective practice (RP), as it is described below. By and large, every teacher has undergone so-called “ups and downs” in the personal history of their teaching career. It is often the case that the former comes from the latter. Many teachers learn lots from their down stories and based on their learning and understanding of such stories, they wake up and build up a better foundation for their teaching. This upholds the former, the success story in the domain of teaching, especially in ELT. Being able to learn from what happened in the past and to share knowledge, information and experience with their colleagues can help teachers to reconstruct and redesign both individually and collectively their future teaching which leads to a success story. It means that teachers cannot stand alone. They need partners to work with and develop their professionalism. Therefore, a success in the classroom depends largely on the personal investment of the teacher, how this investment is enacted interpersonally and socially, and how it establishes the classroom as a safe and engaging zone for language learning (Kiely et al. 2008). This investment is then called RP. It is an amalgamation of thinking and acting.

By performing RP, ELT practitioners authorize themselves to do self-appraisal, analysing the spots where they have satisfactorily performed and to be maintained and developed and the critical areas where further attention and effort need to be harboured. A kind of self-empowering through which a pedagogical change in the form of an informed practice can take place. According to Walsh (2006), language teachers need to reflect on beliefs and classroom practices because they exist in a symbiotic relationship in which both shape each other, and are shaped by each other. This line of thought is based on the belief that the reflective practitioner is constantly changing, both in terms of their understanding of the factors which shape classroom learning, their planning for lessons and learning activities, and their classroom teaching (Kiely 2007). In that sense, reflective teaching can be said as an activity that informs practice yet helps teachers develop their own theories of teaching. Reflective teaching suggests that “theorizing...should be placed upon the shoulder of teachers” (Salmani-Nodoushan (2006: 3). Hence, the teaching quality “can be ensured by doing reflection on what teaching procedures go wrong and why, and teaching procedures go well, and why” (Zeng 2012: 70). Based on these evolving self-developed theories of practice, they are creating the praxis of their ELT. Phrased differently, RP is conceived as the praxis of ELT, which to a certain extent has been practiced by ELT practitioners in Indonesia.

Theoretical framework

The platform of the theoretical framework used in this paper serves as the foundation for building up the conceptualization of RP as well as an analytical tool for analysing, interpreting and discussing the findings of the research.

Ideas of RP

Education is about learning and learning is a function of reflection. According to York-Barr et al. (2006), RP offers one powerful way for educators—individually and collectively—to stay challenged, effective, and alive in their work. RP can nurture teaching practitioners to grow and expand their repertoire of effective instructional practices (p. 27). In doing so, it can be presumed that these kinds of practitioners are striving to move from so-called a culture of doing or practicing to a culture of thinking and learning with doing. This kind of culture (thinking, learning with doing) is what is referred to as the praxis of ELT, which happens to exist in Indonesian context. Hence, the idea of learning should be the first principle attributed to teachers especially learning from their teaching, from their praxis. Realizing that teaching is a complex entity, such complexity of teaching can be the source of learning, which can potentially empower teachers. Hence, as Farrell (2013) suggests that the interest in reflective teaching is principally meant for the empowerment of teachers. Farrell (ibid.) further adds that the element of empowerment emerges when a practitioner is confronted with a problem, he or she identifies the problem as being of a particular type and then applies an appropriate technique to solve the problem.

It is a known fact that reflection includes reasoning, the creative production of ideas, problems solving, and the awareness of all these mental activities in metacognition (Watson 1996), in which the practitioners engage in order to improve teachers’ professional practice (Sellars 2014). This means RP covers a wide range of metacognitive activity, the one which relates to one’s own understanding and awareness of one’s thought processes. Practically, RP pushes teachers from their knowledge base of distinct skills to modify their skills to suit specific contexts and situations, and eventually invent new strategies (Larrivee 2000). In this way, RP can be an ultimate way for educators to search for ever-improved ways to facilitate student learning (Osterman and Kottkamp 2015). In this lens, reflection can facilitate professional development since it helps teachers to think about what happened, why it happened, and what else could have been done to reach their goals (Cruikshank and Applegate 1981).

Sensibly, RP holds an essential dimension of effective teaching as it leads teachers to subject themselves to a process of self-observation or self-evaluation. Practically, by reflecting on what they do in the classroom, teachers specifically

explore their teaching practices and beliefs to check whether these functionally work or not. When run effectively, this reflexivity act can lead teachers to continue modifying their teaching perspectives and strategies for their classroom instruction betterment. Being reflective in teaching can mean being self-actualized. Teachers cannot and should not wait for external experts to come to tell them how to do business appropriately. They have the agency and they have their independency. When these two basic requirements are at hand, teachers are situationally empowered to do reflection. They are autonomous reflective practitioners. Baldez, et al. (2018) note that reflective teaching is a process of self-actualization which, in turn, is a product of the mental work in making sense of meaning. Teachers in this sense have to set up and resurface their own teaching path so that teachers teach what exactly students' needs in the ways students feel good at it. This denotes that teachers who undergo reflective teaching become more conscious about their work in the classroom and beyond (Farrell (2007).

Types of RP

Different authors have different preferences to the categorization of reflection. However, in this paper, the idea of RP is based on the combination of Dewey's (1933) idea of reflective teaching, Schon's (1983, 1987) intuitive, artistic reflection and Farrell's (2007) future-oriented reflection. Dewey (1933) recommended teachers to take reflective action that involves 'active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further consequences to which it leads' (p. 9). In this view, Dewey sees reflective action as a sort of a teacher-self-initiated activity involving willingness to engage in constant self-appraisal and professional development. For Dewey, reflection is a practice which will result in the professionalization of the field and is a means to control "action that is merely repetitive, blind, and impulsive" (Dewey 1933: 17). Yet, Dewey's view on the practice of *common teachers* such as doing repetitive, blind and impulsive teaching acts might not be true in the real practice. Teachers especially ELT practitioners are believed to have and practice the element of reflective practice especially when we get closer to the context of their teaching. Hence, understanding reflection and its practice can mean understanding the major sources of RP that bases the praxis of ELT in Indonesia.

Another type of RP which is more intuitional and "practical" was proposed by Donald Schon. According to Schon (1983, 1987), RP can be divided into two types: reflection-in-action and reflection-on-action. Schon spells out that reflection-in-action refers to the process of observing our thinking and action as they are occurring, in order to make adjustments in the moment. Meanwhile, reflection-on-action denotes the process of looking back on and learning from experience or action in order to affect future action. Ghaye (2011) adds an additional meaning for both types. *Reflection-in-action* can also mean a reflection in a particular context or workplace, for example, in a classroom. *Reflection-on-action* can also mean focusing on something significant. The expansion of the previous two kinds of action was initiated by Farrell (2011), which can be considered as the third kind of action. According to Farrell, this third action, *reflection-for-action* can mean two things. First, we do reflection because we want to understand what we have done better, know more about it, change or improve it. Additionally and more importantly, this reflection is about planning to take some positive steps to do something with what we have learnt. This denotes an element of being proactive by which to guide future action. In this manner, according to Farrell (2007), teachers can prepare for the future by using knowledge from what happened during class and what they reflected on after class. In other words, RP is an action or performance: it is teaching which is shaped and informed by the outcomes of reflection (Kiely 2007), of which the goal is to derive improvement in the practice of teaching for the sheer benefits of students' learning. Hence, RP is a process that 'helps teachers to think about what happened, why it happened, and what else could have been done to reach their goals' (Cruikshank and Applegate 1981: 553). Phrased differently, in order for teachers to be able to learn from their professional experiences, they need to think about, and make sense of, the classroom realities they were encountering during their classroom interaction. How the ideas of RP were unpacked within the Indonesian context was made possible through the methodology used in this research.

Methodology

This section deals with the type of subjects used as a sample, the basis for its selection and how it was selected. Besides, it addresses how the data collected, analysed and interpreted.

Context and participants

Since the goal of this study was to investigate the perspectives and practices of Indonesian EFL practitioners in relation to the reflective practice, as latter demonstrated and articulated in both their observed classroom teaching and semi-structured interviews, the context of this study was the practices as well as the perspectives of ELT practitioners in Indonesia specifically within the regency of Banyumas, central java. The context specifically dealt with ELT in senior secondary schools and universities. The participants of the research were ELT teachers who have been teaching English for at least five years in some secondary schools and universities. All the participants were private permanent academic staff or civil servants (employed by the government of the Republic of Indonesia) and have handled a variety of classes with different levels of proficiency (Year 10 to Year 12 for schools teachers and Semester 1 to

Semester 10 for university teachers). Both purposive sampling and voluntary system were used in selecting the samples. As the same suggest, the purposive sample in this research has been chosen for a specific purpose (Cohen et al. 2011). The criteria set for the sample were that the samples were the ELT practitioners who have been teaching at least for 5 years and teaching at either universities or secondary high schools in the sub-district area of Purwokerto. Their participation was fully voluntary only based on their own willingness to participate and they had the full right to withdraw from the research at any time they consider appropriate to do so.

Data collection

The data used and analysed in in this paper were collected in three data collection techniques: observation, interview and documents.

Observation

An observation is a way for a researcher to document everyday practices of participants and to better understand their experiences (Savin-Baden and Major 2013). Since this is a classroom observation, I served as an unobtrusive observer who aimed at documenting, describing complex classroom actions and interactions (Marshall and Rossman 1999), or a complete observer (Cohen et al. 2011) who only observed and was detached from the group, or a passive observer (Springer 2010) or passive participant (Savin-Baden and Major 2013), as I did not interact with the participants I was observing to avoid potentially biasing the observation and just observed teaching learning activities without engaging in them directly (Larsen-Freeman and Long 1991), despite the fact that my presence alone has an enormous effect on the naturalness of the teaching learning process. Due to the space limitation of this paper, I just presented two out of eight ELT practitioners that actually participated in this study.

Interview

An interview is a conversation between two individuals in which the interviewer asks questions and the interviewee responds (Savin-Baden and Major 2013). In this research I used a semi-structured interview, where the questions were predetermined but the order were modified based the perception of what seemed most appropriate (Robson 2002). In it, I also included additional questions in response to participants' comments and reactions.

In this interview, I explored their perspectives on the ideas of RP (as well as creativity not presented in this paper). Although I prepared a list of questions, the interviewees were set free to express their ideas related to the given topic (Boyce and Neale 2006). This was aimed at capturing descriptive data about the interviewees' ideas, attitudes and perceptions about (directly or indirectly related to) RP in their respective classroom teaching. Sometimes, some additional points were also questioned and answered based on what I thought was important and necessary. Practically, I did post-classroom observation interviews twice with all 8 participants. However, due to space limitation only two participants were considered in this paper

Documents

To complement the data collected through observation and interview, I added documents study. Savin-Baden and Major (2013) define documents as any written, printed, visual or electronic matter that provides information or evidence or that serves as an official record. For this research, the documents to be investigated and studied comprise of 1) teacher's text-books, manuals, teaching journal; 2) students' records, work, test results, daily and weekly performance appraisal, 3) school and university syllabuses, students' register.

Data analysis and interpretation

In analysing the observation and interview data, I just employed content analysis (CA) in order to get a compact data set so that I was able to generate codes, categories and themes and an overarching theme.

Content analysis

In general, the CA I conducted was based on the processes and procedures shown in Table 1 below.

Table 1 Processes of data analysis in content analysis (Elo and Kyngas 2008: 110)

Analysis phases	Descriptions
Preparation	Being immersed in the data and obtaining the sense of whole, selecting the unit of analysis, deciding on the analysis of manifest content or latent content.
Organizing	Open coding and creating categories, grouping codes under higher order headings, formulating a general description of the research topic through

	generating categories and subcategories as abstracting.
Reporting	Reporting the analysing process and the results through models, conceptual systems, conceptual map or categories, and a story line.

Since the defining feature of CA is the process of data summarizing and reporting, this CA focused on summarizing and reporting the contents and messages of the data (Cohen et al. (2011). CA also known for its strict and systematic set of procedures for the rigorous analysis, examination and verification of the contents of written data (Mayring 2004; Flick 2014), it should result in replicability and transferability of the inferences from texts (data) to the contexts of their use (Krippendorff 2004), implying that texts cannot be detached from its contexts. Hence, the qualitative meanings of my data should be described and contextualized (Schreier 2012).

Since the main goal in CA is to seek to arrive at an understanding of a particular phenomenon from the perspective of those experiencing it (Vaismoradi et al. 2013), I explored the perspectives and practices of the Indonesian ELT practitioners within the observation and interview data. On the basis of the procedures in CA, I firstly read the entire transcribed data repeatedly in order to get the sense of the data. Then, using NVivo, I grouped chunks of information referring to similar points related to RP. This collation was not done randomly. I did this through assigning successive parts of the material to the various codes. To make these codes specified, I created categories under which similar aspects of the codes were collated. From these categories, I generated themes that represented the categories and the codes as close as possible. As the final abstraction, I construed an overarching theme, describing the main idea of all themes, categories and codes, which is in this paper about the praxis of ELT in Indonesian context.

Findings and discussions

All the findings in the research were aimed to provide sufficient answers to the explorative question of the following: "In what ways are the Indonesian ELT practitioners reflective in their teaching practice?" The analysis, interpretation and discussion of the findings are based on the results of the CA as indicated in Table 3 below.

Table 2 Results of CA of RP

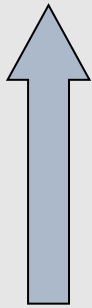
	Overarching theme	RP as the praxis of ELT in Indonesian context		
	Theme	Reflection-in-action	Reflection-on-action	Reflection-for-action
	Categories	Teaching adjustment	Teaching evaluation	Teaching planning
	Codes	Adjusting lesson plan and changing teaching approach	Evaluating teaching materials and increasing students' motivation	Planning for improving students' speaking ability
	Units of analysis	Excerpts 1 up to 6	Excerpts 7 up to 9	Excerpt 10

Table 2 displays the results of the CA indicating the components of the praxis of ELT in Indonesia entailing three types of reflection as the themes of the analysis. These are used as the basis for the following data analysis, interpretation and discussion.

Reflection-in-action

Teaching itself is a reflective activity as it is hard to imagine a teacher who does think when designing, planning and acting his teaching. Evaluation is usually conducted through self-reflection. This implies a reflective teaching whereby teachers engage in a successive series of reflection and modification. Reflective teachers, as Salmani-Nodoushan (2011) suggested, reflect on their own teaching practice (i.e., self-observation) and then modify their practice (i.e., self-evaluation) to make sure the outcome will be satisfactory. For reflection-in-action, the analysis is based on three main guiding queries: what was planned, what was done, and why was it considered reflection-in-action?

A). What was planned?

The activities specified in the lesson plan to be performed by the teacher include four main points: to explain, to do question and answer sessions, to guide games, and to assign tasks to the students. The lesson plan also mentioned the activities that the students are supposed to do which cover four equivalent activities, namely to listen, to perform question-and-answer, to play the games (role-plays), and to do any given assignment, as shown in Excerpt 1 below.

Excerpt 1:

R: Ooh, actually in the beginning you wanted an individual work?

P5: Yea. I wanted each student to show his or her ability to make sentences, but I saw their responses were quite slow. Besides, there were some students who were late so the information given beforehand was not had by the late students.

Interview with P5: C1C1U1

From the excerpt, I learn that the lecturer (P5) had a pre-planned activity for the students, namely the students were required to do an individual activity to make sentences using compound verbs and later compound subjects. This activity, however, was not explicitly stated in the lesson plan. Very likely, this pre-planned activity belonged to the fourth list of student activity in the lesson plan, i.e. to do any assignment given by the lecturer in the classroom. Due to a certain reason, this pre-planned activity was not performed well by students therefore P5 decided to change that activity with a group-activity as explained in the next section. In this excerpt, there is an element of teacher cognition when P5 said, “but I saw their responses were quite slow.” The term *teacher cognition* here refers to the unobservable cognitive dimension of teaching—what teachers know, believe, and think (Borg 2003). Based on her teaching cognition—what she knows, believes and thinks about her students’ responses in her teaching activity—she decided to depart from their lesson plans to another teaching approach, which was group work activity.

B). What was done?

Like the other participants in this research, what P5 has done in her teaching practice indicates that she has a sense of practicality, which is having the ability to evaluate what seems to work and what does not seem to work effectively. She knows when things can keep going and when things have to be stopped and changed with another technique of teaching. Hence, in the beginning of her teaching she tried to implement what she has already put into her lesson plan be it written explicitly or implicitly. In her written lesson plan, she just used a general a general statement “asking students to do tasks”, but in her implicit lesson plan she asked her students to make sentences using compound subjects or verbs individually. In the real practice of her teaching, P5 asked her students to make sentences from the pictures she provided using the compound verbs and helping verbs where necessary as shown in Excerpt 2 below.

Excerpt 2:

P5: Maybe it's a new story for you. Okay, I want you to make sentences from the picture that I am showing to you. Okay, what do you see here? Maybe you can think about sentences to describe the picture here. Okay ya. What does he do? Pull ya. Pull out... pardon? Pulling out something. So, can you say something by using compound verbs? Describing what is a... the grandfather here doing. Come on anybody. Okay, please make sentences by using compound verbs describing the picture here. Can you think of something from the picture? Ya, please. Ella, say something about the picture. What about... *dia mencabut lobak dan*/he pulls out a turnip and... What is it?

Observation with P5: C1C1U2

Based on Excerpt 2, we see that P5 was trying stimulate her students to make sentences based on the picture in the slide show. Using picture to stimulate students’ ideas was already a creative act that later she explained as the result of her reflective practice. With the picture, P5 hoped to arouse her students’ imagination of what the people were doing and to transform the imagination into sentences. The picture was quite matching and relevant as it showed more than one person doing some things. P5 thought that the students could have quick line of thinking that some activities or actions were performed (a clue for constructing compound verbs) by different people. P5 tried to trigger her students by giving a clue (a translation) of the word *mencabut* which is to pull out. However, her students still look hesitant and found it hard to make sentences using compound verbs. The students were not quite convinced to transform the people in the picture into the subjects of a sentence, and to convert the activities into a series of verbs. One student made a trial but still wrong. Probably, the students had not fully grasped the idea of compound verbs (as well as compound subjects). Therefore, P5 provided two options as shown in Excerpt 3 below.

Excerpt 3:

P5: Okay, pull out and get. Okay, he pulls out... he pulls out or he is pulling out which one do you like better? You want to use continuous or do you want to use present?

S: He is pulling out and getting a big turnip.

P5: Okay ya Adi, so he is pulling out, he is pulling out and getting a big turnip. Ok, do you agree? He is pulling out and getting a big turnip. Ok would you mind correcting this? Please take look at the picture here. Others please prepare your sentences. We will see whether you can make the correct sentence or not. Okay.

Observation with P5: C1C1U3

At this point, P5 started to look and feel uncomfortable with the fact that her students could not generate sentences using compound verbs based on the shown picture. Hence, she decided to re-explain the idea of compound verbs in order that her students became clearer about it. She expected that after the second

explanation, her students could make such sentences more swiftly.

Excerpt 4:

P5: Oke let me show the example again to make it clearer... Okay so, here is an example of the compound verbs. A compound verb is simply more than one verb, *Jackson saw the spider and screamed*. So, is it Jackson who saw and also who screamed? Okay. So, it is the same subject with two different verbs. Do you get it? So, you get my point? Ya, so the sample will be like *grandpa yells and waves*. So it's grandpa who does two different things and the things are in the same position, they are the main verb, not helping verb. Another example is *Grandma gives a corn and smiles*. She gives and smiles, she does two actions at the same time. So, hopes that it's clear for you. Ya, so let's take look at the picture again. So, what...what do you think about the granddaughter here?

Observation with P5: C1C1U4

From Excerpt 4, we learn that P5 tried one more time to explain the concept and structure of compound verbs. She hoped that her students could learnt it better and able to construct the sentences she asked based on the pictures. At this stage, P5 also introduced the concept of compound subjects, a sentence that has more than one subject. Likewise, P5 showed other pictures based on which the students had to make sentences. At this stage, the students made some trials but again still failed to create correct sentences. P5 seemed to realize that probably working individually as she applied in the previous exercises that seemed not to work effectively was not a good option for this activity since the students remained confused and consequently unable to produce the expected sentences. Then, P5 made a reflective and quick thought on other strategies she might use to ease the students' problems in understanding the compound verbs so that they could make correct sentences. This swift of classroom activity marks the conjecture that P5 was performing a reflection-in-action, the action of thinking and evaluating a particular activity she was doing in her teaching. Based on her swift reflection on the efficacy of individual activity in making sentences, she decided to change it into a group work activity. In addition, there were some students coming late, who missed some parts of the explanation on the subject that certainly needed more explanation. To deal with this complex state, she decided to ask her students to work in groups so that the other students can share the information on the compound sentences with those coming late, as seen in Excerpt 5.

Excerpt 5:

P5: Now think about making sentences by using compound verbs and compound subjects according to this slide. Ok, please think about it. Now you'll work in group, how many students are there? One two three four five six seven eight nine ten. Okay we can make it into five groups, so you can work in four, so you... two students come here, please work together with them. So, it's groups that consist of four students and each group please make as many sentences as possible. You can make a circle with your friends. Come on, you can make a circle. Please, discuss about it. You will make sentences using compound subjects and compound verbs. Eee... You can write down as many sentences as possible. I will give you ten minutes to create sentences as many sentences as possible. We will see which group can create the most ee...sentences. Ya, remember you compete with other groups so you have to make the best... sentences.

QQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQ

In Excerpt 18, it is clear that P5 has changed her approach in doing the activity. She has tried to apply individual work strategy but not working effectively in this kind of activity. The students often looked dubious about their answers or sentences they have made. They seemed to need partners to share their ideas, to compare their answers, and to ensure that their understanding was the same as their partners. Understanding this situation, P5 therefore had an initiative to change that individual approach into a group work approach, dividing students into five groups with four members in each group. In this way, P5 assumed that the students would not rely too much on her but they could exchange their ideas, their work first with their partners. At this stage, the students looked more enthusiastic perhaps because they could share their "burden" with their friends and find answers together. So as a teacher, she appeared to be more assertive in asking the students to compete to make as many sentences as possible and to prove which group could make the most and correct sentences. This teaching move clearly indicates that P5 has done so-called acting while thinking in order to make the classroom activity run more effectively.

D). Why is the difference a reflection-in-action?

Like the previous participants' classroom practices considered to be demonstrating the notion of reflection-in-action, this P5's classroom activity is certainly without exception. Its foregrounded situation, its moment of thought (though not explicitly seen and identified as it was in the mind of the teacher, P5), its immediate action taken to deal with the situation, and its intention which was for improvement of the practice are all identified. All these features are even justified by P5 in the interview in which she said that she tried using individual work technique which did not work in the way it was hoped and finally had to be changed (into a group work technique). Such justification can be identified in the following excerpt.

Excerpt 6:

R: Do you think in one session you can change your teaching technique?

P5: Yes. Yes. For example like what I had just now. At first, it was an individual task, I asked each student to make sentences. But seemingly it was quite slow and made me impatient since it was not like my expectation. I have been waiting as I really wanted to see each student to have a quick thought bla..bla..bla..But their response was quite slow. So, I asked them to work in group instead.

R: Ooh, actually in the beginning you wanted an individual work?

P5: Yea...yea...I wanted each student to show his or her ability to make sentences, but I saw their response was quite slow. So, I directly changed the mode of learning and asked them to make group work. In group work, they feel that if making mistakes they will not be recognized. If there is something wrong they will take ownership or responsibility altogether. So, they usually become more confident when working in group.

Based on Excerpt 6, we learn another reason that is the students' response was quite slow. The word *slow* here refers to students' inability to grasp the idea of compound verbs and compound subjects and to create sentences based on the pictures provided. P5 also mentioned the positive sides of working in groups that is the students can feel safe when making mistakes as they will not be boldly recognized by other students. In addition, according to P5, if there is something wrong (making wrong sentences) they will take ownership or responsibility altogether, it is not an individual mistake. Therefore, P5 added, when working in group, the students usually become more confident. Based on these considerations, P5 initiated a change in her teaching approach or technique, which is from individual work to collective work. In brief, P5 has all the necessary situations and requirements to take that a thought in action by assessing what seemed to work and what did not seem to work well. This action called reflection-in-action suggests the praxis of ELT in the classroom setting in Indonesian context.

Reflection-on-action

Reflection-on-action tends to be specifically undertaken after the event, problem or situation that initiated the process (Sellars 2014). This concept very fortunately is widely accepted among teaching practitioners. Slightly different from the stance of reflection-in-action, this reflection-on-action means looking back, in this regard, looking back at the teaching learning process to identify aspects of teaching and learning that can be improved in the next teaching or action. This signifies that the action, which is certainly reflection-on-action, is a kind of 'a deliberate, conscious and public activity principally designed to improve future action' (Ghaye 2011: 25). The examples of this looking back action are taken from the second part of the results of the CA is depicted in Table 6.2 below. Accordingly, all the data analysis and interpretation are based on these CA results.

A) Evaluating teaching material

Improving teaching certainly needs a critical evaluation especially by the teacher himself or herself since only he or she does know his or her teaching better than any other people. This implies the stand of 'improving teaching and teacher development that begins from a reflection on what we actually do, on our own teaching and experience' (Ghaye 2011: 24). Therefore, an evaluation from the eyes of the teacher plays a significant role in augmenting his or her quality of teaching which can affect the quality of his or her students' learning. This kind of reflective evaluation is voiced by P3 reflecting her own teaching practice. The stance of such reflection-on-action serves to make much that was implicit explicit and enhance your level of awareness and consciousness of how you frame teaching situations (Zwozdiak-Myers 2012: 39). Hence, classroom teaching learning evaluation is something inherent in teaching learning process. This implies that when teachers are evaluating their lesson, they are also reflecting on it. When teachers are evaluating their students' work, they are making an assessment or a judgement about the work. The stance of evaluation within the frame of reflection-on-action seems to refer much to the formative evaluation, which 'enables teachers to translate feedback into 'modification, adjustment, directional changes, and redefinitions as necessary' (Cohen et al. 2007: 192), which assist teachers to identify weak spots in their teaching and improve where possible.

The idea of evaluation for improvement is voiced by P3 as shown in Excerpt 7 below.

Excerpt 7:

R: When your students find it hard to understand your teaching material, what would you do?

P3: Ooh I would just do an evaluation to find out what was difficult to understand in that material? For example, there was a difficult theme, then if I wanted to use that then I needed to explain it, but if I didn't want to, I just could skip it or simply changed it with an easier one. Sometimes like that. May be the theme was not relevant, why bothering, simply eliminate it and change it. Of course I need to evaluate the way I presented the material as well.

Based on the information from Excerpt 7, we can identify at least two main points. First, if the material was not well grasped by her students, she intended to check her lesson materials and compare or match them with her lesson plan. She would review what was not working well. If the material was not relevant, then she could just eliminate it and changed it with a more relevant one. Second, P3 understood that the problems might not stem from the material but very likely from the method used in teaching the material. Therefore, P3 aimed to do an evaluation, and when necessary P3 could make a change in the teaching technique. It is clear that to make a change in her teaching technique through reflection-on-action she was positioned in the process of looking back on and learning from her experience or action in order to affect her future action (Schon 1983, 1987).

Creating interesting materials

Undoubtedly, all teachers want to have an interesting lesson for their students. To realize this, a teacher is to do anything that make it possible. A teacher might improve his or her teaching approach, provide more interesting games, and upgrade his or her teaching materials. Of course, there are many other possibilities. The point is that a teacher is bound to evaluate his or her own practice if he or she wishes to keep his or her own teaching or lesson become more and more interesting. Such teaching perspective and practice was also upheld by P8. He paid a special concern on teaching materials. He always wanted to provide an interesting teaching material for his students. Therefore, he always tried to update it regularly at least in every semester. In his view, an interesting material means the one that is appropriate for students' level of language proficiency, matches students' needs and enable to arouse students' enthusiasm to learn the material. P8 seemed to realize that all these features can be actualized through critical self-evaluation although he did this not on a regular basis, as depicted in Excerpt 8 that follows.

Excerpt 8:

R: When you finished teaching, do you do self-evaluation or some kind of reflection on what you have taught?

P8: What I was thinking when I was thinking was that how to make the teaching become rather more appealing, just like that. So, what often happened was that why the teaching didn't make the students enthusiastic to learn. Not quite interesting for them. For example, just now I was teaching eee...occupational conversation or occupational speaking yea...

R: He'emm.

P8: I recognized that the students likely seemed to be interested but not that much. Maybe from the material that I gave was not quite appropriate for them. Therefore, every semester like what I did in the past as well as in this semester, I certainly had to change the material because it didn't fit them well.

Interview with P8: C2C1U2

From Excerpt 8, it is clear that P8 is a reflective teacher as he always observed his own teaching and students' learning. Based on his observation, he often found that his students were not quite intrigued with his teaching and assumed that probably it was due to non-captivating material. This state led him to think how to make his material enchanting so as to lure his students' interest to learn. Diagnosing and evaluating is the trademark of his teaching practice. Therefore, the solution should be searched. This reflection-on-action provides an important process in learning about the professional activity of teaching (Zwozdiak-Myers 2012: 39). Therefore, for P8, the simpler the material the better. When I identified a weak aspect of the material, I then evaluated P8's aptitude to read his students' psychological state is a lucid mark of his reflective sensitivity, while his action to change his teaching material legitimizes his reflective practice. From the excerpt, P8's reflective action also spotlights that when thinking and action are merged the outcome is an improved practice. In the long run, this becomes catalysed professional development in ELT.

Increasing students' motivation

This motivational element is definitely pivotal in language teaching and learning. Logically, in order for a student to speak or write in English well, he or she certainly needs an adequate vocabulary mastery that allow him or her to construct sentences to communicate their ideas. The same is true for motivation. It plays an essential role in students' success in learning. Usually, those who have high level of motivation will learn faster and more productively than those who have low level of motivation. In other words, these two need to be instilled and increased so that students can have a better result of their language learning. This signifies that P4 needs to create situations which enable learners to become actively engaged. That implies that she wanted to have a solution, a sort of an improvement in her teaching. Generally teacher development begins from a reflection on what teachers actually do, on their own teaching and experience (Ghaye 2011). The elements, vocabulary and motivation, become a special concern for P4 in his teaching activities, as clearly emphasized in Excerpt 9 below.

Excerpt 9:

R: Based on your teaching evaluation, what do you think you need to do to improve English teaching and learning?

P4: I think the first thing to do here related to English is to give motivation. Yeah...to raise spirit, to live up their motivation, and I think one of the ways is to invite a native speaker once in a semester and this can boost their enthusiasm to learn English. And I have tried to do this once or twice in the past.

Interview with P4: C2C1U3

In this excerpt, P4 pointed out utterly that he often does self-evaluation on the conduct of his own teaching. He seemed to count on the idea that a teacher who often does self-evaluation will be more capable of enhancing his or her own teaching performance which can improve, as a result, his or her students' learning. This indicates that a reflective teacher should consider seriously the efficacy of his her teaching approach, the appropriateness of teaching materials, and the criticality of teaching evaluation. Based on his thorough evaluation on his students' learning, P4 found out that most of his students lacked of vocabulary. Consequently, his students often had problems in comprehending the ideas of reading texts. Based on my observation in his teaching practice, I noticed that P4 repeatedly gave his students challenges to get the meaning of some expressions when he presented listening materials in the form of an announcement by a native speaker. This arouses interest in the classroom since it involves the challenge of sustaining learners' efforts over time until their goals are achieved (Hall 2018). Another weak point P4 identified in his students' learning was that many of them lacked of motivation in learning English. Although there was no further information regarding this demotivated phenomenon, P4 underpinned that to inject the students' motivation the school needed to invite native speakers of English to come to his school. According to P4 in the excerpt, the presence of native speakers in his school can uplift students' enthusiasm to learn English since P4 had proved this approach beforehand. The main point earned from P4's reflective teaching is his teaching has to make his students more enthusiastic, more motivated and more able to understand the lesson. This implies that in P4's teaching, he needs to use such techniques as showing your enthusiasm for a topic, subject or teaching, treating each pupil as an individual, providing quick feedback by marking work promptly, and rewarding appropriate behaviour (2001: 103).

Reflection-for-action

Reflection-for-action, is the desired outcome of both reflection-in-action and reflection-on-action, which enables teachers to prepare for the future by using knowledge from what happened during class and what they reflected on after class (Farrell 2007: 6). How the Indonesian ELT practitioners have practiced reflection-for-action, the amalgamation of both reflection-inaction and reflection-on-action so that they become more informed on their practice through which they can have a better plan for a better future action as shown below.

Improving students' speaking ability

Practice what you preach is a meaningful credo for an ELT practitioner who is engaged in RP particularly in reflection-for-action. The value of any great planning is manifested when it is put into a real practice. A professional ELT practitioner involved in RP deals with both planning and action. Indeed, a good planning will prevent teachers from doing a random action. Therefore, it can be inferred that reflection-for-action in this discussion entails three phases: observing, planning and acting. It is a critical framing and reframing of ideas with the intent of developing an action. As ELT practitioner, P8 seemed to have distilled the gist of reflection-for-action, not only because he is aware of the significant impact the action brings about, but also because the course he teaches (speaking class) naturally requires more practice than theory. In this course, P8 develops his own theory of teaching based on his own practice of teaching. The success of his teaching can be measured in surface by the frequency of practice of the lesson demonstrated by his students. Therefore, students' activeness in speaking practice becomes his primary trajectory. As a result, the approach he takes in his lesson is changing a speaking partner as frequently as possible, based on a general underlying maxim: practice makes perfect, the most practical way to improve speaking ability of the students. These points are indicated in Excerpt 10 below.

Excerpt 10:

R: When you did a self-evaluation or reflection on your teaching practice, what plan did you have in your mind for next teaching practice?

P8: Usually I thought about the kind of action I should take. For instance, in Speaking class I found one or two students who could not speak English fluently. I just thought how to make them happy to talk. Therefore, in speaking I told the students to keep in mind that next week they have to talk and they cannot just sit with the same partner.

R: I see.

P8: Hence, in the next classes, I checked the students' previous speaking partner as I didn't memorize who was partnering with whom. I asked them, "Did you sit with her last week? I had to know that they have changed their partner.

Interview with P8: C3C1U1

Based on Excerpt 10, P8 is very concerned with the active participation of all students in conversational practices. From my observation when P8 was handling his speaking class, I noted that he was also very active to go around the

class to ensure that every individual was involved in the intensified dialogue. Sometimes he interrupted his students' talk and got involved in the conversation or some other times his students asked him about something (i.e. vocab) and he was ready to partake in the hectic conversation. He strongly insisted in asking his students to speak up, to question, to respond, to argue and to keep changing their partners so that the class was lived up and dynamic. This mode of teaching practice conforms the essence of reflection-for-action. It is the actualization of what was thought of, what was evaluated, and what was planned.

Conclusion

Based on the previous discussions, can be inferred that Indonesian ELT practitioners to a certain extent actually have been dealing with RP in their ELT praxis. They have been practicing the ideas of RP manifested in three forms of reflection: Reflection-in-action, Reflection-on-action and Reflection-for-action unique to their own contexts. Based on their observed classroom practice and interview, they have indicated that they did make an adjustment in their lesson, changed their teaching approach, evaluated their teaching materials, sought ways to motivate their students and improve their students' speaking skills. All these indicate that Indonesian ELT practitioners' teaching is RP-based praxis.

Biography:

Muhamad Ahsanu, originally from Indonesia, was born in a beautiful island, Lombok, where he spent his primary and secondary schools. He completed his undergraduate program in 2000 majoring in ELT. One year later he earned his master degree in The Netherlands in 2002 in Educational Training Systems and Design. From 2002 up to 2007 he worked in hotels in Bali and Lampung. Since 2008, he became a staff in the Faculty of Humanities, Unsoed, Central Java, Indonesia. In 2013 he gained his second master degree in Linguistics. From 2015 up to present he has been pursuing his PhD in ELT at the University of Southampton.

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DEVELOPING PROJECT MANAGEMENT COMPETENCE THROUGH CONTINUING PROFESSIONAL DEVELOPMENT

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ABSTRACT

*Professional bodies require their members to engage in continuing professional development (CPD); however, the impact of CPD training on competence development is mixed. What could be responsible for the mixed result on competence development beyond the intrinsic motivation of the candidates? Project management (PM) pervades all activities. The ever changing industry and academic world alike necessitates PM competence in diverse areas as well as the use of PM tools and techniques. CPD through formal training institutions, notably, Higher Education Institutions (HEIs), provides the opportunity for continuous upskilling. HEIs' philosophical orientations need to cater for different disciplines, professions, persons, societies and systems at large. Consequently, the aim of this study is to compare PM competence development through different formal CPD models. The objective is to ascertain if the model of formal CPD affects PM competence development. Kennedy's (2005) 'Models of Continuing Professional Development: a framework for analysis', *Journal of In-Service Education*, vol. 31, no. 2, pp.235-250 is used as a conceptual framework. The methodology follows a positivist philosophical stance, a deductive approach to test the hypothesis of a difference in competence development based on the CPD model, and a mono method quantitative methodological choice. A cross-sectional survey of two cohorts of candidates (Cohort 1: 27 of Award-bearing Model of CPD and Cohort 2: 16 of Deficit Model of CPD) was used. Both cohorts were purposely-sampled based on formal training registration at one of the HEIs in South Africa. Quantitative data on the impact of the influence of the CPD on development of 47 PM competences and 39 PM tools and techniques from 1 (none) to 5 (extreme) were collected using online structured questionnaire. The ordinal data were analyzed quantitatively to rank the PM competences and PM tools and techniques using mean, standard deviation and co-efficient of variation. The nonparametric Wilcoxon Rank-Sum test was then performed to test the hypothesis of a no difference in competence development of Cohort 1 and Cohort 2. The results show a significant difference between the two cohorts. The main theoretical implication of the results include the need to apply the necessary educational theories in the design of education and teaching when HEIs are conducting CPD training. The main practical implication of the results is for the professional bodies and companies to conduct training needs analysis for their members to be able to identify the critical needs for competence development, aligned with the right model of CPD. The limitation of this study has been restricted to the small sample sizes of both cohorts and the potential impact of the selection bias based on the sampling technique adopted.*

Keywords: Continuing Professional Development; Competence; Project Management; Tools and Techniques; Higher education institutions

“YOU GUYS DON’T USE IT” – MAKING COURSE EVALUATION EXERCISES COUNT

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ABSTRACT

*Evaluation exercises for teaching and courses signal the end of an exhausting semester for the students. It is little wonder that the students approach an evaluation exercise with a lackluster attitude; after all, according to one of the many students who approach the exercise as a tick-box culture “You Guys Don’t Use It”. How can educators make course evaluation exercises count? Lecturers and students serve as the points of departure in evaluation exercises because of the strong engagement existing between these two as co-constructors of knowledge. However, this opportunity is not being maximized due to the restrictions placed by the standardized process of the evaluation exercise in most institutions. Similarly, the inability for the lecturers and students to view and use the evaluation exercise as an integral part of the learning experience, by approaching it as a form of reflective journaling. The aim of this study is to explore how a course evaluation exercise can be used to reinforce learning. The objective is to assess the viability of journaling as a form of course evaluation exercise. Based on Ron Griffith’s (2004) ‘Knowledge production and the research-teaching nexus: the case of the built environment disciplines’, *Studies in Higher Education*, vol. 29, no. 6, pp.709-726, the research-informed teaching (RIT) model is used as a conceptual framework. RIT covers the diverse range of techniques that place the learner at the center of teaching, in as much as the quality of teaching is not compromised. The methodology follows a pragmatism philosophical stance, an abductive approach based on a simple mixed method choice. A cross-sectional survey design of a cohort of honors level Construction Economics and Management students in a University in South Africa is used. Data collection is based on an online semi-structured questionnaire. Eighty (80) students were purposively-sampled, while 71 students responded. The 88.75% response rate was higher than the average of 54% response rate achieved through paper-based evaluation exercise of the preceding four years. Quantitative ordinal data were collected on students’ levels of agreement with ten motivations for learning from 1 (strongly disagree) to 5 (strongly agree). Qualitative/textual data were also collected on students’ reflection on self-directed initiatives to enrich their learning experiences as well as what the lecturer has or could have done to better enhance their learning experiences. The ordinal data were analyzed quantitatively to rank the most common motivations among the students while the textual data were content-analyzed to identify the common themes. The results show how a course evaluation exercise can serve as a self-reflective journaling for reflective practice both for the lecturer and the students. Properly-designed, it is a form of self-assessment to reinforce and intervene on the learning experience as against the prevalent tick-box evaluation exercise culture. Consequently, the theoretical and practical implications for educators are discussed. The limitation of the study has been restricted to a cautious generalization of the results due to contextual differences.*

Keywords: Educators; Evaluation; Research-informed teaching; Standardization; Students

TEACHING STUDENTS WITH AUTISM SPECTRUM DISORDER(ASD)

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ABSTRACT

For decades, the diagnosis of Autism has risen dramatically in the United States. As of 2018, 1 out of 59 children is diagnosed with Autism Spectrum Disorder. This has been caused by a number of different factors, but mainly it's due to the diagnosis criteria expanding and early detection. Those with Autism Spectrum Disorder (ASD) face unique challenges, and depending on the specific sub-set of their diagnosis, require certain accommodations and considerations when it comes to how they learn. As educators, we will inevitably have these students in our classes. Understanding how someone with ASD learns is essential to meeting the needs of these students. In this presentation we'll cover ASD, symptoms and manifestations of ASD, and finally approaches and considerations we can take as educators to accommodate those with ASD.

HARMONISING QUALITY MANAGEMENT ISSUES FOR TRANSNATIONAL HIGHER EDUCATION

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ABSTRACT

There has been a growing demand worldwide for Transnational Higher Education (TNHE). Higher Education programmes can be provided and accessed for a fee in different places, anywhere at any time. This has increased the provision of programmes offered across borders by UK higher education institutions (HEIs). These HEIs are forming partnerships with organisations abroad, offering programmes offshore or in country. Overseas institutions are seeking UK undergraduate and postgraduate degrees driven by local demand, at a fee commensurate with local conditions. The market place for delivery of such programmes is not yet saturated; demand and supply have not yet reached a state of equilibrium.

A plethora of terms have been used to describe this provision for overseas delivery. The terms used include Transnational Higher Education, cross-border education, etc. However, in practice, within universities and the higher education (HE) sector, the terminology commonly used is Transnational Education (TNE). Practitioners in HE understand that TNE encompasses the term 'Higher' as delivery takes place in HEIs as opposed to primary or secondary education. This research acknowledges and uses this term hereon in for such partnerships.

This increase in demand has resulted in an increase of UK HEIs providing TNE programmes. Commentators have raised concerns about quality and managing TNE as early as 1993 where Yorke noted, there was virtually no public information regarding franchising to private institutions within the UK and to organisations beyond the UK. This research has investigated how quality management of programmes can effectively be aligned and harmonised by managing expectations of both stakeholders – those offering and those delivering the provision, irrespective of their global location.

The research has explored practices of quality management for TNE across three partnerships – UK, Singapore and Sri Lanka. In this case, the UK HEI is the TNE provider, and Singapore and Sri Lanka are the host or receiving institutions. The driver for the investigation arose when differences were noted in practice, across regions. Colleagues at respective partnerships had varying perceptions and expectations of what quality management meant and how it impacted TNE programme delivery. The study, comprising of regional triangulation, was further complimented by hierarchical triangulation within each institution – namely at 3 levels: strategic, tactical and operational. Semi-structured interviews were used and questions were developed from themes discussed and drawn from the literature.

Examining these differences in regional opinion contributed to a mutual understanding of quality management of TNE programmes and their delivery. This awareness provided new knowledge and understanding for TNE programme quality management for the UK HEI concerned, its overseas partnerships in Singapore and Sri Lanka and more importantly, for the HE sector. A common framework has been developed and proposed for enhanced quality management and quality assurance practices, thereby harmonising delivery for TNE programmes. The framework is to be used and shared across HE sectors, anywhere in the world.

Keywords: Transnational, Higher Education, Quality Management

ENGLISH AS A CATALYST FOR DEVELOPMENT: THE SOCIOECONOMIC CONTEXT OF INDIA

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ABSTRACT

English is an inadvertent gift of the British Raj to India. Irrespective of the purpose for which it was introduced – primarily to facilitate colonial administration – it has, over time, played the role of a catalyst in modernizing Indian society and strengthening its economy. India is far better off today for English than it would have otherwise been – socially and economically. English was the best thing to have happened to India in a thousand years. Its significance Indian society and economy is inestimable.

In social terms, communities which gained access to education in English medium early enough, such as the Parsis and the Syrian Christians, experienced rapid social and economic advancement. Many other social groups, and even individuals, followed suit and soon found themselves in an advantageous position. In case of some depressed communities as well, English has acted as a liberating force by serving to partially demolish age-old social barriers, besides improving their economic lot to a degree. Indian society, in general, could shed much of its traditionalism and obscurantism, which had weighed it down for millennia, and embrace modernity in multiple ways.

In recent decades English has helped India pull off an economic miracle consistently recording high growth rate. This has been possible among other things because, after more than a thousand years of intellectual, social and economic stagnation, English gave India a jump-start in the fields of science and technology by allowing easy access to modern education and knowledge. India could bypass the various stages of development and intellectual maturation, which took the western societies several centuries to go through, and become a modern technology-driven nation in a surprisingly short period of time. English has also helped India transition from a predominantly agrarian economy to a thriving service economy, providing in the process employment opportunities to vast numbers of young people, and enabling many of them to work abroad and regularly remit foreign exchange worth billions of dollars.

All these developments, facilitated to a large extent by the English language, have contributed to an irrefutable social and economic transformation of India. In the context of India thus English is not just a language; it constitutes the intellectual ecosystem steadily altering its socioeconomic landscape. Against this backdrop, this paper seeks to analyse the role English has been playing in the transformation of India from the colonial past to the prosperous present, and then examine its potential contribution to the further advancement of Indian society and economy. It concludes by reaffirming the need to continue with the strategic use of English in various domains, in spite of the occasional onslaughts on it by mother tongue advocates, if India is to remain on a steady growth path and fully achieve its development objectives.

Keywords: English language, depressed communities, Indian society, economic transformation, intellectual ecosystem

ORIENTING TEACHING AND LEARNING OF THRESHOLD CONCEPTS OF ACIDS-BASES TOWARDS SUSTAINING FIRST-YEAR CHEMISTRY STUDENTS

ROYDA KAMPAMBA

ABSTRACT

Students are known to experience difficulties in understanding acids-bases concepts from primary school up to undergraduate degree level. Acids-bases are one of the most important threshold concepts (TCs) in chemistry (Furio-Mas, Calatayud, & Guisaselo Furio-Gomez, 2012). At my institution, many activities in acids-bases involve laboratory works, definitions of Arrhenius, Bronsted-Lowry and Lewis, strong and weak acids and bases, conjugate acids and bases, buffer solutions, calculations of pH values and concentration (CBU, CH 110 course outline, 2019). The transition from Arrhenius to Bronsted-Lowry and Lewis models requires a deep understanding of the reactions. However, much research has not been done to determine the implications of inadequate teaching and learning of acids-bases, as a threshold concept, on other chemical reactions in chemistry (Cooper, Kouyoumdjian & Underwood, 2016). Enhancing first-year teaching and learning of TCs of acids-bases requires a deep understanding of challenges chemistry lecturers and students experience. A new shift for the teaching and learning of acids-bases is to integrate the theory of TCs of acids-bases. Students need to master the TCs of acids-bases for their studies have to enter the liminal space. A liminal is an in-between space or problem-solving-space, where lecturers and student negotiate teaching and learning. Lecturers labour to bring students up to the point where they have to cross luminal space. Space has culture, roles, schemata, and resources, rules of engagement that determine whether they are going to be successful or unsuccessful. Both lecturers and students have to negotiate the rules and use resources as mediators of learning. This research paper interrogates the challenges lecturers face and proposes means of ameliorating first-year students' failure and dropout rates in my university.

Keywords: Threshold Concepts, Acids-Bases, Negotiate, Dropout Rates, Liminal

GENDER REPRESENTATION IN EDUCATION: CRITICAL DISCOURSE ANALYSIS OF URDU TEXTBOOKS USED IN PRIMARY GOVERNMENT SCHOOLS IN PUNJAB

SALMAN GHAURI

ABSTRACT

This research aims to explore the gender equality or lack thereof in the Urdu textbooks taught in Punjab, Pakistan. Gender bias in textbooks is an important but almost invisible and overlooked problem. Five Urdu textbooks taught in primary classes in Punjab were selected for critical discourse analysis. Both qualitative as well quantitative research methods were adopted. Among other things the number of female and male characters, portrayal of domestic and professional roles by both genders, and cosmetic bias was taken into account. In all five books analyzed, women characters consisted of 59 characters (28%) whereas 151 male characters were present in the stories. These female characters were mostly found in domestic situations with insignificant roles. The stories and text were highly biased towards the male characters. Since textbooks play a crucial role in the development of the children, it is important to remove the concealed gender bias in textbooks and acknowledge the changing roles of women in the Pakistani society.

Keywords: Gender, education, textbooks, Urdu

RETRIEVE THE BASIC ROOTS OF MODERN STANDARD ARABIC LANGUAGE : “PROFICIENCY TEST IN ARABIC”

DR. SARAH DAHER

*Founder of Bil Arabiya for language and modernization
Association*

ABSTRACT

Although the Arabic language is used by a significant percentage of the world's population, in recent years, it has witnessed a gradual decline. Globalization and the use of English as the main language of the world wide web have led to the regression of Arabic, which has been losing ground at an alarming pace among young people in the Arab world. Therefore, in order to protect our mother tongue and secure its future, we in Bil Arabiya association created a test called Proficiency Language test in Arabic that evaluates and assesses the candidate's ability to handle Arabic language through 4 different skills: Writing, Speaking, Listening and Reading. As a result, we will be able to identify the problems and thus improve the Arabic language level. The test also aims to minimise the serious mistakes made every day when using Arabic, whether made by students in high school, journalists or politicians. We applied the test in different fields in cooperation with universities and international organisations. The results proved the efficiency and efficacy of the test after detecting the level of improvement and enhancement in using the Arabic language among participates.

Keywords: Arabic Language; Proficiency Language test in Arabic; regression, improve

Introduction

Arabic language, like most languages, has a standard form. This standard, known as ‘Modern Standard Arabic’ MSA or (Al-‘arabiya al-fuṣḥa), is used in all forms of writing and religious sermons and texts, and is only spoken by news presenters or by heads of state in political addresses or debates.

For more than a century, the MSA has been endangered, intentionally or accidentally, by external threats as well as internal disregard and neglect. In Lebanon for example, although Arabic Language is mentioned in the constitution as the official language of the nation, almost no one uses it in daily conversations, instead they use English, French or even dialects to communicate.

Today, unfortunately, we see the language mix between Arabic, English and French that was regarded positively in the past as reflecting Lebanon’s diversity, it has become a threat to the mother tongue. Most schools in Lebanon teach three languages from an early age, and many parents prefer to send their children to French- or American-curriculum schools where Arabic comes second or third. In fact, many parents are proud that their offspring don’t speak MSA and mothers sometimes berate their children to speak Arabic in public as they have a prestige complex. They associate the Arabic language with a low class image and uncivilized past and they take pride in speaking foreign languages instead of Arabic.

Adding to that, the Lebanese education system, which is supposedly in Modern Standard Arabic, use in the classroom a mix of languages between MSA and colloquial spoken Lebanese dialect. As a result, many young Lebanese found themselves in a confused state of linguistic limbo and they start to struggle with basic Arabic reading and writing skills. The mass media is contributing also to its downfall, it has become very common for young people, particularly when using Facebook and text messages, to write Arabic using Latin characters. The usage of this non-standard romanization of Arabic has led to a decline in Arabic literacy in Lebanon. Many young people have forgotten how to read and write Arabic.

In response to the problem of Arabic Language regression in the Arab world and particularly in Lebanon, **Bil Arabiya for language and modernization Association carried out a project called “Bil-arabiya”** under which the idea of **“Arabic Proficiency Language Test”** is created.

1. “Bil Arabiya for languages and modernization Association” Review and Background

Bil Arabiya association was founded in 2015 under the License number 1373. It is located in Boucharieh, Metn Lebanon. The association’s main goal is to overcome the weakness in the level of the Arabic language, by providing various services for particulars and companies, such as : Proofreading and Grammar checking, dissemination of university transcripts, writing Arabic research and articles, translation and expressions, teaching Arabic Language, offering training courses and organizing conferences in Arabic.

Beside the above services, Bil Arabiya had several activities, projects and participations to promote the Arabic language and raise awareness on the importance of using it correctly and effectively. The listed below are some of these activities:

- Lanching of the "Enlightened Lebanon 2018" program for illiteracy, education and fighting truancy, in cooperation with UNESCO and the Ministry of Social Affairs.
- On the occasion of the World Day of Arabic Language, Bil Arabiya, Participated in the First Arab International conference in Beirut on 2016, under the auspices of the Lebanese Ministry of Culture, with final recommendations delivered to Dr Ghattas Khoury, Minister of Education and HE Minister of Education Marwan Hamadeh.
- Organizing a national competition on the name of the great writer Amin Nakhla: prose, poetry and painting. The competition was announced officially by Ministry of Education in Lebanon, in which all Lebanese high schools both public and private participated.
- The establishment of the Maria Children's Club, that teaches Arabic in a modern style suitable for the new generation, to bring them closer to their language.
- The establishment of the Arabic Academy , that provides linguistic and literary lessons for Arabs and foreigners.
- Launching a website and a smart phone application.
- Participation in a meeting held by the Department of Culture in the League of Arab States 2017 Committee of Experts in the Arabic Language and the presentation of a working paper.

- Participation in the UNESCO conference on the occasion of the World Day of Arabic Language in 2016 and 2017 by presenting a working paper.
- Participation in annual conferences organized by the International Council for the Arabic Language 2015 and 2016. (Working paper)
- Participation in the conference organized by the Institute of Ibn Sina in Paris 2015 and the presentation of a working paper.
- Participation in the organization and presentation of the International Day of Arabic Language Celebration at the Saudi Embassy - Lebanon. (Organization and Presentation)
- Participation in the annual conferences organized by the Arabic Language International Council in 2015 and 2016.
- Participation in the conference organized by the Ibn Sina Institute in Paris 2015.

In addition to these activities, one of the biggest projects implemented by Bil-Arabiya is the **The Arabic proficiency test** which we are going to focus on, in this report.

2. The Arabic Proficiency Language Test

“**The Proficiency Language Test in Arabic**” is a standardized examination in Arabic, targeting both Arabs and foreigner candidates of all ages, who use Arabic in their daily work assignments, whether in writing, editing, or casting. The test is suitable for High school students, university and college students in certain majors and even professionals like journalists and government employees.

The test is similar to the internationally recognized language test. It assesses the candidate’s ability to handle the Arabic language through 4 different skills: Writing, Speaking, Listening and Reading. The main purpose of this test is to establish a unified base and to evaluate and assess the level of Arabic Language in each candidate.

It should be noted that “Bil Arabiya for languages and modernization Association” was classified by the Ministry of Education as an authorized body to carry out the “ **The Arabic Proficiency Language Test** ” and the test was approved in 2018 by the ministry of Education in Lebanon under the decree number 2018/m/810.

2.1. Background and overview

This project was the result of several studies and researches in our Arab societies in general and Lebanon in particular, through which we noted several reasons that led us to the idea of “proficiency testing in Arabic”:

- The Arab students language dilemma, in which the students find it difficult to interchange between the MSA and colloquial dialect smoothly, where they often feel confused and intersperse the MSA with words from the colloquial dialect.
- The results of the National examinations, which indicate a decline in the success rates in the Arabic language exams. In 2013 for example, the results of the Arabic exam in the middle school national certificate were surprising, where only 20 000 students out of the 61 000 succeeded. This represents only 33.7%, which is considered as the minimum percentage, perhaps, since the beginning of official examinations.
- The disinterest that parents have towards their children mastering the Arabic language compared to foreign languages.
- The huge number of mistakes made every day by most members of our Arab society, including politicians, media professionals and diplomats.

In light of these reasons and since Arabic is one of the most widely spoken languages in the world, we have decided to launch the idea of the project “**The Proficiency Language Test in Arabic**” which aims to:

- Preserving the Arabic language and strengthening it, which thus leads to the preservation of the Arab identity.
- Reducing the mistakes that have become many and serious in correspondence, media and politics.
- Raising the educational attainment of every student.
- Acting as a reminder of Arabic grammar rules to be composed by people and society in general, because ignorance is the parent of fear, and therefore when the rules of the language should be used correctly.

2.2. Test Presentation

Thanks to the many schools that have opened in Lebanon over the last few years, Lebanese students has acquired both French and English culture and became fluent in both languages. We find a four year-old child speaking fluently those languages, but in contrast face a difficulty in using his mother tongue.

Therefore, **The Arabic Proficiency Language Test** came to help secure the future of the Arabic language and maintain the status of the Arabic language in our societies.

The test has two types: General and specific. Each is divided into four sections: reading, listening, writing and speaking.

- Listening: understand the audio and write it down correctly.
- Reading and analysis: the ability to understand what is written and analyzing it.
- Writing: the ability to express with clear ideas using correct words with no grammatical errors.
- Speaking: the ability to have a conversation in Modern Standard Arabic : taking into account the exits of the letters and the sequence of ideas.

At the end of the test and according to the candidate's result, his level of proficiency is determined:

- (90/100) Excellent
- (80-89 / 100) Very good
- (70-79 / 100) Good
- (60-69 / 100) Fair
- (50-59 / 100) Poor

The test requires only basic knowledge of Arabic grammar and the questions are developed by a professional committee of Lebanese academics and linguistic experts to evaluate the each one of the four skills.

2.3. Test implementation

In order to apply the idea of the test, Bil Arabiya for languages and modernization Association collaborated and cooperated with different organizations and universities to implement the test and determine its impact and therefore received feedback for further improvements. In this report we will present five different fields where the **The Proficiency Language Test in Arabic** were applied.

2.3.1. Launching the Arabic proficiency test in collaboration with the American University of Science and Technology (AUST) to mark the International Arabic Language Day.

This was the first test applied. It included military officers and members of the Lebanese army, internal security forces, Lebanese general security, administrative staff, students of international relations and law.

The number of participants was 21, and the success rate was 90%. The participants wrote in a relatively good language, with acceptable dictation on a social and human subject. They made a great effort to answer the questions by choosing the correct answer from four suggestions in three sections: content and structure, language and grammar, rhetoric and its types. The helped the Bil Arabiya association tests to identify the kinds of mistakes in order to correct them in future courses. The errors included but were not limited to : incorrect phrase structure, inconsistency of ideas and wrong word usage.



The Arabic Proficiency test in collaboration with AUST

Result	Number of participants	Percentage
Success	19	90%
Failure	2	10%

*Table1: Percentage of success and failure in collaboration with AUST***2.3.2. Organizing a training course in Arabic grammar for media professionals at the Association's premises in Boushrieh.**

The training was carried out by the media journalist trainer Mr. **Bassam Barak**. He focused on four stations prepared on his work forms, including descriptive, narrative and informative texts, contained what a journalist needs in a variety of situations: grammar, pronunciation, reading and linguistic interpretation, composition of the sentences before recording or broadcasting them with the retrieval of the main rules and writing their conclusions.

*Training course for media professionals led by the media Journalism Coach Mr. Bassam Barak***2.3.3. Organizing a course for proper communication in the Arabic language for military personnel at the headquarters of the Lebanese Ministry of Defense in Yarze.**

This course was prepared and trained by the media journalist - trainer Mr. **Bassam Barak**, for fifteen-hours. At the end of this course 30 military personnel were tested after rapid diagnosis. They demonstrated progress in understanding and comprehension of the language. The results were 60% success, among which 20% succeeded with excellent grades, 20% with good grades. The duration of the exam is one hundred and twenty minutes including grammar, punctuation, formation, reasoning, mistake correction and expressive writing.



Military personal listening to the media journalist trainer Mr. Bassem Barak during the training for proper communication

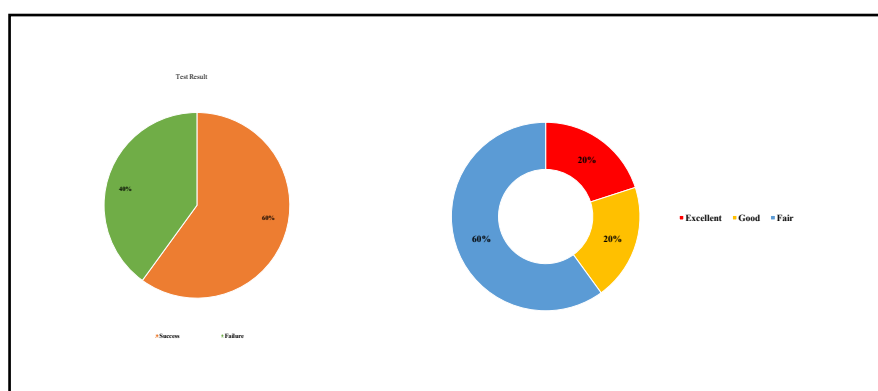


Table1: Grades and Percentage of success and failure for military personnel

2.3.4. Organizing the Arabic proficiency in cooperation with ESCWA for specialized translators as part of a training in Arabic translation.

The test was about text understanding and explanation of ideas, in addition to the expression and punctuation. A video tape was also played to detect the ability to describe the sequence of events, qualities of characters, some other details in addition to linking information within a table and classification by titles.

2.3.5. Working on organizing a test for the Military Academy students in late September 2019.

The light will be shed on correct spelling, coherent phrases, good reading and comprehension of a syllabus, as well as a clear verbal expression of personality and confidence relating to a particular idea.

2.4. Test improvement and adjustments

The actions mentioned above are considered the road to achieve the goals and objectives that Bil Arabia drew, however, the experience with the trainees imposed an amendment that better serves these objectives and impact the Arabic language positively :

- Diversification of the text questions between monitoring of meanings, identifying words' meaning, inferring the idea in the paragraph, summarizing ideas and choosing the correct answer from a selection of suggestions.
- Including in the test, an expression exercise with a suggested answer and correct the wrong one if applicable.
- Verbal expression limited to one question to answer within two minutes in a correct language and direct opinion.
- Criteria for written expression to illustrate the detailed correction mechanism.
- Tests of two hours and one hour and a half depending on the need of institutions and the importance of the Arabic language within their work frame.

- Adding a visual tape to the audiovisual exercise (social, cultural, humanitarian, and artistic subjects ...) to enable trainees and those who participate in the test to stimulate both hearing and sight senses.
- Meticulously selecting the visual- audiovisual exercises in order to be suitable for every participant no matter their level of Arabic Language. They will contain questions of understanding, monitoring and identification in different forms.

Conclusion

The Arabic language is a pillar of the cultural diversity of humanity. It is one of the most widely spoken languages in the world. However, since the last decade, this language has been facing different challenges in its region. One major issue is the existence of the very many spoken dialects (which are unwritten) against that of the modern standard written Arabic (MSA) and the expectation that children need to learn, master and be competent in both. This issue not only affected the students and children but also has impact at a professional level, where we see serious mistakes made everyday by journalists, government employees and even politicians. Therefore, and in order to improve the contemporary status of Arabic Language and preserve the language from any kind of erosion that might affect it, we created a proficiency test that evaluates the level of each candidate in MSA through a series of questions evaluating four different skills: Listening, Reading, Speaking and Writing. Based on the result, each candidate will be attributed a grade ranging from Excellent to Poor. The application and the implementation of the test in various fields in cooperation with government institutions, universities and international organizations, gave us a clear vision on improvements that have to be done to make the test better. It also showed us the importance of this test in determining the level of each candidate in mastering the Arabic Language and how it helped them to detect the common mistakes they make and thus avoid them and enhance their use of Modern Standard Arabic.

Author Biography

Dr. Sarah Daher, holder of a PHD degree in the Arabic Language from the Lebanese University, is author, social and cultural activist. She is also the President and the founder of “Bil arabiya Association for Languages and Modernization” and responsible of launching “Lebanon enlightened” program for literacy, teaching adults and fighting truancy. Founder of “Arabic Proficiency Test”, the first test of its kind in Lebanon. She contributed to many seminars and conferences namely in Lebanon, Paris, Dubai, Egypt and China.

EFFECTIVENESS OF REFLEXOLOGY IN PREVENTION OF POST-OPERATIVE PAIN AFTER GENERAL SURGERY

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ABSTRACT

In this study we tried to find out the efficacy of reflexology in prevention of Post-operative pain. Different types of methods has been used for prevention of post-operative pain.

- 1- **Conventional Method**-Analgesia- diclofenac and pethidine
- 2- **Non-conventional Method**- Acupressure, Acupuncture and reflexology.

Purpose: *To find the efficacy of Reflexology in patients with postoperative pain after general surgery.*

Method: *Sixty (60) adult patients of general surgery from The All India Institute of Medical Science over the period of 2001-2005. Patients were divided randomly into two groups.*

Group I: *Reflexology group (foot reflexology and required quantity of standard drugs.)*

Group II: *Control group (standard quantity of standard drugs.)*

Standard drugs included: NSAID (Diclofenac) and Opioids (Pethidine and Fentanyl).

Pain score was measured by using a visual analog scale of 0 - 10. In Group I, pain was measured at the time scale of 0, 2, 6, 24 hours, and additionally, 20 minutes prior to each hour. 20 minutes is the time interval before and after therapy. 0 hrs. Is time which patient was shifted to recovery room. In Group II, pain score was measured at time intervals of 0, 2, 6, and 24 hours only.

Result: *Group Ist showed a significant decrease and absolutely significance in pain scores and the requirement and quantity of drugs in group 1 as compared to group 2,*

Discussion-*under most circumstances pain causes the greater amount of suffering. Particularly after general surgery .the effect of foot reflexology causes a v.significant reduction of pain score and pain killer in group I in comparison with group II in post-operative patients of general surgery.*

Key words-Effectiveness of reflexology in prevention of post-operative pain after general surgery..

Introduction

Pain: Post-operative pain is attributed to the cutting of pain fibers or irritation of pain nerve endings.

Gating Theory

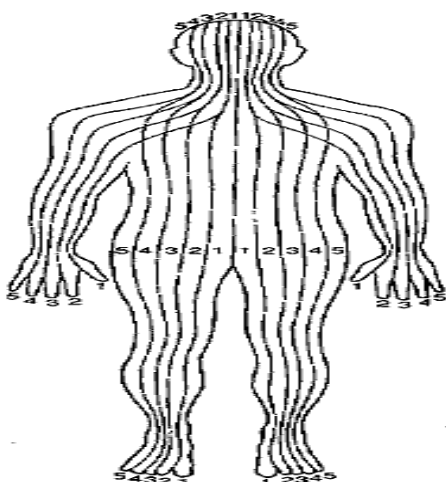
Specific neural pathway for specific pain fibers (A delta nerve fibers) travel through the spinothalamic tract towards the central nervous system. When touch and pressure is applied on specific reflex point, it would activate slow conducting C fibers that take the same pathway thereby inhibit the path of A delta nerve fibers and block the pain.

Reflexology- Reflexology is the act of applying pressure on the corresponding point of disorder organ/ area of the body to the feet and hands with specific thumb, finger and hand technique without using oil, lotion or cream, use telecom powder. The physiological changes achieved with the application of pressure are based on the neurological relationship that exists between the skin and the nervous system. Whereas, a therapeutic effect can be achieved by stimulation at a distance from the area where the pressure is applied. Reflexology believes that the body is reiterated, or mirrored on the feet and hands and works within a zonal system, as introduced by Dr. William Fitzgerald. According to the zone theory, the body is divided into ten equal longitudinal zones (five on the left side and five on the right side) running through the body from the top of the head to the tips of the toes. If there is congestion in any part of the body, the corresponding zone is affected. Using this theory, we apply direct pressure to any part of the affected zone to stimulate the entire zone. Dr. Riley supported the zone theory and his assistant, Eunice Ingham plotted the reflexes of all the body areas onto the feet, thus creating the foot map.

The study of Reflexology is based on anatomy and physiology of the human body. The principle of Reflexology is founded on the understanding of how the nerves work and what they mean to the human body.

Body of paper

Reflexology is one of the most miraculous means of utilizing a natural healing method for maintaining the body in a post-operative condition. Reflexology is a non-pharmaceutical intervention. The body's vital life force circulates along pathways with an estimated 800 points on the body. It is not necessary to know all of these points since the hand as well as the feet contain "reflex buttons" which are connected to all organs and glands. When these reflex centers are stimulated, they instantly send a surge of new vigor to the part of the body they are connected to and with no side effects.



Body representing the various Zone



Foot Map

The use of Reflexology has increased in medical care. Recent reports include usage in birthing, OBGYN care, postsurgical care, ICU, and patient support. The International Institute of Reflexology clearly states that it does not make any medical claims.

Theory of Reflexology: There are over 7,200 nerve endings in each foot, which have an extensive interconnection with the central nervous system. These nerve endings are part of our sensory apparatus in which they sense pain and pressure, hot and cold, etc. Reflexology stimulates or fine-tunes this sensory apparatus and its neural pathways. Stress patterns are also manifested on the feet. There are many theories of Reflexology, some of which are explained here

Applied Theory - the foot reflects the body's response to the stresses of gravity and movement.

Blood and nerve supply theory - When muscles become tense, they press on the arteries causing sluggishness in circulation. This results in toxins in the blood, which would normally be excreted. At these deposits, needle shaped crystals settle in the extremities of the hands and feet. It is believed that these deposits interrupt some nerve impulses and cause dysfunction in the blood circulation. Reflexology applies pressure to break down the crystals and release

them through the excretory systems.

Pain: Post-operative pain is attributed to the cutting of pain fibers or irritation of pain nerve endings.

Methods used in prevention of post-operative pain:

1. Conventional Method - Painkillers such as NSAID (Diclofenac) and Opioids (Pethidine and Fentanyl.)

2. Non-conventional Method - Acupressure, Acupuncture and Reflexology.

Method: Sixty (60) adult patients were randomly divided into Group I (Reflexology group and Group II (Control group)

Step I Reflexology group (foot reflexology plrs the required quantity of standard drugs.) N=32(males, 20 February

Step II Control group (standard quantity of standard drugs.) N=28(12Males, 16 females)

Standard pain killer's rsed: NSAID (Diclofenac) and opioids (Pethidine and Fentanyl.)

Pains measurements were used in this study:

1. Measurement of quantity and requirement of painkillers.
 2. Measurement of pain score.
- Score was done at four (4) different time intervals.

Group I – Pain score was measured 0,2,6,24 hours and 0 hrs. - 20 min, 2 hrs,-20min., 6 hrs.-20 min and 24 -2 min.

Group II – Pain score was measured at 0,2,6,24 hours.

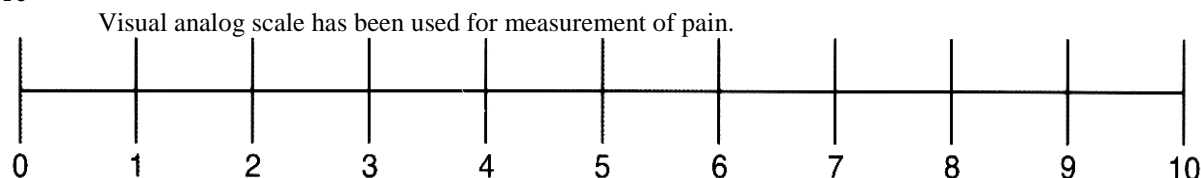
0 hours as defined as the time patient was moved to recovery room.

20 minutes is the time before and after Reflexology therapy.

It was noted that there was a decrease in the requirement and quantity of painkillers in the Reflexology Group I compared with the Control Group II

Pain was monitored on a visual analog scale (VAS) of 0 to 10, with 0-5= Mild pain, 5=Moderate pain, and 5-10 Severe pain.

Pain score



0-5 = Mild pain

5 = Moderate pain

5-10 = Severe pain

In group I (Reflexology Group) post operated pain has been monitored in hours and minutes both at the time interval of 0 hours, 0-20 minutes, 2 hours, 2 hours – 20 minutes, 6 hours, 6 hours – 20 minutes, 24 hours, 24 hours – 20 minutes.

Group I received foot reflexology for 15-20 minute. Sessions began with reflexology tech-niques, and thumb (thumb walking and dig and back up and finger (finger walking and finger rotary pressure) working techniques. Areas reflexes were specific to type of surgery performed and the related areas of pain.

Results:

Comparison of quantity of painkillers in Group I and Group II

Time Interval: 0 hrs.	2 hrs.	6 hrs.	24 hrs.	
Group I	65.5%	19.5%	75%	65.5%
Group II	100%	85%	100%	100%
	P=.001	P=.001	P=.005	P=.002

This study shows a decrease of the quantity of painkillers in Group I to less than 50% as compared to group II.

Statistical analysis was done by applying the Fischer exact test (chi square test).

Comparison of pain score in group I and Group II

Time Interval:	0 hrs.	2 hrs.	6 hrs.	24hrs.
Group I	5.25±1.646	4.906±1.201	3.813±.5748	2.28±.683*
Group II	6.393±1.397	4.43±.8	4.43±.8	3.143±.5
	P= .007	P= .026	P= .009	P= .000

Comparison of pain in group I (Reflexology group) and in group II (Control group)

S.No.	GP (I) Mean ± SD	GP (2) Mean ± SD	P value
1.	5.25±1.646	6.393±1.397	.007
2.	4.906±1.201	4.43±.8	.026
3.	3.813±1.5748	4.43±.8	.009
4.	2.28±.683	3.143±.5	.000

The result shows that pain score is less in group-I in comparison of group-II and the all results is significant.

*An absolutely significant decrease of pain score in Group I as compared to Group II. Statistical analysis was done by applying the “T” test.

Comparison of pain score in Reflexology Group I before and after Reflexology therapy.

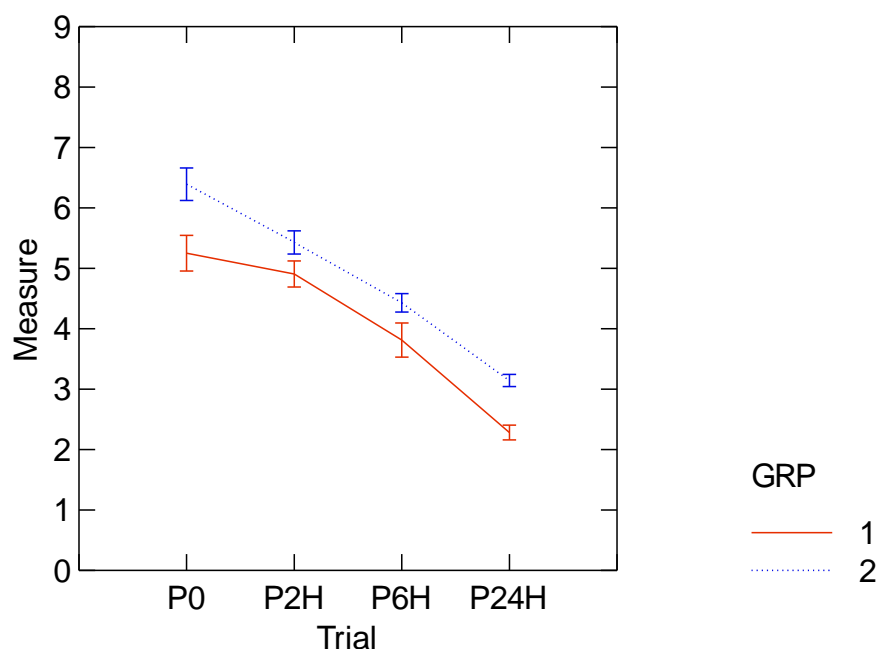
Time Interval:	0hrs	2hrs	6hrs	24hrs
Group I				
Before therapy	5.25±1.65	4.91±1.20	3.81±1.57	2.28±0.68
After therapy	5.28±1.42*	3.91±1.20**	3.06±1.46	1.59±0.84**
	P=.927	P=.000	P=.007	P=.000

*A non-significant decrease of pain score in Group I after Reflexology therapy.

**An absolutely significant decrease of pain after Reflexology therapy.

Comparison of pain in group-I in hours and minutes

	Mean	±SD	P value
1. P 0 h	5.25	±1.65	.927
h 20 m	5.28	±1.42	
2. P 2 h	4.91	±1.20	.000
h 20 m	3.91	±.96	
P 6 h	3.81	±1.57	.007
P 6 h 20 m	3.06	±1.46	
P 24 h	2.28	±.68	.000
P 24.h 20 m	1.59	±.84	



Discussion

Under most circumstances pain causes the greater amount of suffering, particularly after major surgeries.

The specific area of central nervous system to which afferent nerve fiber pass determines the type of sensation For example, if a pain nerve fiber is stimulated by heat, cold, touch, and pressure, the individual will experience only pain

Gating Theory

According to this theory pain signals pass through a number of traffic "gates" as they move from the area of injury upwards through the spinal cord to the brain. Like a road or highway, these nerves can handle only a limited number of nerve signals at one time. The pain signals travel slowly. We can generate C fibers through use of Reflexology by applying pressure on a specific reflex point.

Reflexology generates competing stimulus of C fibers and effectively blocks the slow pain signals from reading the brain, blocking the pain pathway The gating theory says that pain impulse can be blocked in the spinal cord by habiting signals coming from touch nerve fibers due to this relief in pain.

Reflex Conditioning

1. **Stimulus** - Information is sent from the foot to the brain.
2. **Evaluation** - The brain analyzes the information.
 2. **Evaluation** - The brain analyzes the information.
- 3 **Response** - After brain response to the recent information by sending instruction to the entire body

About how to adapt Transduction It is a process by which one form of energy (the stimuli) is changed to another form of energy (electrochemical energy of nerve impulse. The stimuli when applied to the receptor, brings about a change potential of the plasma membrane of the nerve ending. Since this process takes place in the receptor, it is referred to as the receptor potential. If the receptor potential is large enough, it generates an action potential Impulse conduction is simply the movement of action potentials along a nerve cell.

It has been observed in other studies in pre-operative insertion of intradermal needles at visceral associated BI acu points reduces postoperative pain scores, opioid requirement, opioid- related side effect and adrenal responses induced by surgical stress in patients undergoing upper and lower abdominal surgery. Postoperative pain management aims not only to decrease pain intensity but also to increase patient comfort and to improve

postoperative outcome. Better pain control is achieved through a multimodal combination of regional analgesic techniques and systemic administration of analgesic agents. To guarantee uneventful follow-up and unnecessary Prolongation of hospital stay, it is important to avoid side-effects of analgesic agents, especially those of opioids which are dose-related, by decreasing opioid demand through combination with non-opioid agents. Epidural analgesia not only has the advantage of providing potent and effective analgesia but also of hastening recovery of bowel function and facilitating physiotherapy and rehabilitation. Unfortunately, a reduction in postoperative morbidity and mortality by epidural analgesia has not actually been demonstrated. Inclusion of postoperative pain treatment in a multimodal approach of patient rehabilitation may improve recovery and shorten hospital stay. Effective treatment of postoperative pain is also likely to prevent chronic pain syndrome after surgery, but further studies are needed to support this hypothesis. So in this research study we tried out the effectiveness of reflexology for prevention of post-operative pain and also reduce the quantity of pain killer or analgesia after general surgery.

Biography



Dr. Shweta Choudhary was born in a district named Muzaffarnagar of Uttar Pradesh (India). Her late father Mr. Suresh Pal Verma was a former agriculture engineer, devoted his life to spirituality. Her mother. Mrs. Mithilesh Verma a former teacher and now is Rajyoga meditation teacher in Meerut.

Dr. Shweta completed her undergraduate studies in Biology and Chemistry and completed post-graduate studies, she taught in their chemistry Dept. to graduate and post – graduate students in 1999 and Worked as JRF and Ph.D. student in Dept. Of Biophysics AIIMS, New Delhi in 2000-2006. Student.

She studied ‘the efficacy of reflexology for prevention of post-operative nausea vomiting and related pain’. Dr. Shweta worked in the general surgery Dept. with Dr. Anurag Shrivastva, Prof. of surgery and Dr.T.P.Singh former H.O.D of biophysics AIIMS. and learned the applications of Reflexology with him. She studied reflexology under the guidance of late Mr. I.P. Bahl, Founder President of All India. Acupressure Reflexology.

She worked 2 years as Lecturer in Subharti Univ.Meerut and worked two years with Acharya Maharshi Maheshanand as research Scientist in Patanjali Haridwar. Further goal of research to do work on reflexology, yoga and Rajyoga meditation.

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DISMEMBERED BY COLONIALISM: NADINE GORDIMER'S JULY'S PEOPLE AND ITS SUBLIMINAL COMMENTARY ON THE AFRICAN FAMILY STRUCTURE

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ABSTRACT

Nadine Gordimer's much celebrated July's People largely narrates the story of White and Black community relations at the chaotic dawn of South Africa's 'post-apartheid' moment. Therefore taking into consideration the dynamics and themes that have been tackled by this novel, the focus of this paper is on July's People and its capacity to comment and analyse some of the continuities and discontinuities that have rendered African biological fathers as absent from their nuclear families, especially their young and growing children. The paper concentrates on a novel's ability to unmask the lasting impact of colonialism in the cultures of fatherhood among Africans that have been subjected to the oppressive tactics of settler-colonialism in South Africa. Whether dismembered from their families as a result of employment migration systems, settler-conveniences in urban spatial planning or the resultant alienation that develops as a result of the extended absence of fathers from home, this paper analyses the novel in relation to such form of family disintegration. Lastly, by juxtaposing the 'perfect' family structure of the Smale's against that of July (Mwawate), the paper grapples with how the novel can act as a 'register' of memory in the dismemberment of settler colonised and neo-colonised societies.

Keywords: Nadine Gordimer, *July's People*, African, Fatherhood, Colonialism

Introduction

Trends in the family structures of South Africa illustrate that the legacy of settler colonialism has had a dilapidating role in how some Africans make sense of family² cultures and involved parenting. Whilst there are several factors that have contributed to the dismemberment of African families, some academic literature has directly traced the cause of such dismemberment to the settler-colonial history of South Africa. Furthermore, the impact of such dismemberment continues to reverberate in the modern and 'post-apartheid' nation state of South Africa. Ramphele and Richter (2006:80) for instance argue that "the disruption of families and of parenting under colonisation and apartheid, by both men and women, has left its mark on children and on their children". Such analysis has also alluded to the continuities of the disruption of such African family structures as a result of the legacy that has been inculcated by settler colonial oppression on Africans and 'other(ed)' races of the country.

Some research reports on the state of family structures in South Africa indicate that African families have been in a systematic and engineered destruction as a result of the demands of settler colonial capitalist system which has long required African men to abandon their families in service of settler-colonialist privileges and conveniences. This form of family abandonment often required African men to be absent from their families for extended periods of time (Ritchter, Chikovore, Makusha, 2010; Horwits, 2001; wa Thiong'o, 2009; Walker, 1990; cf. Engle and Breaux, 1998). In this paper, the focus is therefore on how a novel 'registers' the continuities and discontinuities of this family abandonment by African father's in service of settler colonial South Africans. Partially, it asks how the crisis of family disruption and abandonment as a result of settler-colonialism has led to a continued legacy of dismemberment among African families. Taking into consideration that "desertion is not always physical, it can also be emotional" (Ramphele and Richter, 2006:79) this paper examines the subliminal role of a novel (*July's People*) in recording the role colonialism in the dismemberment that continues to being experienced at the level of African family structures (cf. Eddy, Tomson-de Boor, and Mphaka, 2013; Bertelsmann, 2016).

July's People, one of Nadine Gordimer's (1981) acclaimed novels is a literary account of the volatile situation of South Africa during the last dying days of formal settler colonial administration of this country (colonial-apartheid). Largely scripted to give a revolutionary perspective into the political situation of the country, the novel among its many themes tackles a long complex but explosive relationship between a White family and its Black domestic / garden worker in the wake of a fictional revolutionary war that was taking place in the country towards the aforementioned political independence from White settler colonial rule³. The novel was set "during an imagined revolutionary war of the future [which] offers context, in which white power is tottering, if not already fallen" (Smith, 1984:94). Thus the novel revolves around a White family and their bid to escape the chaos of an avant-garde war with the help of their long time domestic helper and "servant": July (Mwawate). With the colonial normative order and future of the country uncertain, especially for the settler colonial communities, the Smale's eventually take up residency in July's (Mwawate) unnamed distant Bantustan home where the dynamics of White and Black co-existence are tackled in an African rural village. Of interest is that, whilst various themes are tackled by *July's People*; race relations, power, family, loss and 'mourning' (Chima and Ifeyinwa, 2014; Clingman, 1981; Nixon, 1992); surprisingly the theme of colonialism in dismembering African families has been under theorised by scholars who have analysed this particular novel.

Hence the central aim of this paper revolves around how *July's People* grapples with the subject of family dismemberment⁴. As discerned from the analysis of this novel, this paper delves on the traces of dismemberment in July's (Mwawate) nuclear family and how he relates to his family that has been separated, for often extended periods of times as a result of the settler-colonial policies on migrant labour in South Africa. Overall this paper is also aimed at analysing the role of White colonial capital in dismembering cultures of fatherhood in African families as portrayed by Nadine Gordimer's *July's People*.

² For the purpose of this paper, the concept of an African family is analysed in its nuclear nature as portrayed by July (Mwawate) in Nadine Gordimer's novel. ³ In this paper, the idea of apartheid and settler colonial rule is judged to be a complex yet single entity. This is also done in support of Fanon's (1967) argument that has noted that in the

context of South Africa, apartheid has been nothing but a compartmentalisation of the colonial situation.⁴ The idea of an African nuclear family structure in the context of this paper is also introduced to illustrate the dramatic changes that have taken place around African families as a result of the impact of colonialism and particularly Christian missionary ideologies.

Continuities And Discontinuities: The Legacy Of Absent Fathers In South Africa

South Africa, as a colonial construct, colonial lived reality and a modern nation state was created with a specific purpose of catering to and fulfilling each and every need of White settler colonial communities. This was a community which came to South Africa “with the intention of making a new home on the land, a homemaking that insists on settler sovereignty over all things in their new domain” (Tuck and Yang, 2012: 5). Therefore this aspect of the settler-colonial project in this country marked an on-going and evolving nature of race privileges as experienced and lived across the race divide of the country. Furthermore, these acts of homemaking by settler colonisers probably contributed to the on-going race related problems of the 20th and 21st century. Du Bois (1903:16) argued that “the problem of the twentieth century is the problem of the color-line, - the relation of the darker to the lighter races of men in Asia and Africa, in America and the islands of the sea”. Most importantly, it can be argued that this problem of the color line and race relations has led to a scenario where African man have had to sacrifice their entire lives in service of White settler colonial communities in Africa and across the diaspora of African communities. “Households and families were harassed and torn apart by restrictions on people’s movements, by migrant labour, by forced resettlement, and by the resulting poverty and disarray in the most painful of ways” (Ramphele and Ritcher, 2006:78).

Thus the problems of dismembered and separation of African family structures can also be traced to the White administrative / settler colonialism (external/internal colonial modes and strategies) and its attitude towards the existence of African communities within the colonies. It is in this vain that Ramphele and Ritcher (2006:80) further argue that colonialism and its apartheid policy in South Africa has inculcated a continuing ‘culture’ of disrupted family structures among African communities. The ‘culture’ of disrupted African family structures has continued to exist because colonisation “was a fate with lasting, indeed grotesquely unfair results, especially after national independence had been achieved” (Said, 1989; cf. Fanon, 1962). The question therefore in this article is how does Gordimer’s *July’s People* tackle this national and cultural anomaly that has become endemic as a result of the engineering of African societies and culture by the settler colonial structure for several centuries? Whilst formal settler colonial administration was negotiated out of existence in 1994 South Africa, research literature continues to illustrate that its legacy of dismembering African family structures live on (Stats SA Report, 2017). These statistics reveal that “South Africa has the lowest marriage rate on the continent, the second highest rate of father absence in Africa after Namibia, [and] low rates of paternal maintenance” (Ritcher, Chikovore and Makusha, 2010). Furthermore, these anomalies of dismembered family structures have been blamed on the capitalist settler colonial system of accumulation and its impact on the oppressed. “Migrant labour and the resulting residential separation of partners, delayed marriage, and the growing delinking of childbearing from marriage” (ibid., 2) have resulted in a culture of dismembered family structures among the indigene of this country. Ultimately, in South Africa, and the Southern Africa region as a whole, the combination of colonialism (settler and administrative) as well as colonial spatial planning and its logic of urban areas within Southern African have resulted in acute forms of structural separation of “men from children and families” (ibid., 2)

Therefore, whilst the involvement of father’s in the family and children’s lives are important in the development of a societies wellbeing (Engle and Breaux, 1998), the case of African families seem to have been altered as a result of the social engineering and entrenching of settler colonial systems. Horwits (2001:111) concludes that “the effects of the absence of large numbers of men from their rural homes undermined rural family structures and household economies”. This absence of African men from their nuclear and extended families was largely instrumental in the operation of the South African capitalist economy. “Land alienation, rising taxes and a succession of natural disasters saw spiralling numbers of people entrapped in non-discretionary patterns of migration” (ibid., 111). Therefore the conclusion that is discerned from such an argument is that various forms of colonial strategies were used to destroy the family structures which had existed among Africans, and this contributed to the alienation of men from their families.

Therefore, whilst the involvement of father’s in the family and children’s lives are important in the development of a societies wellbeing (Engle and Breaux, 1998), the case of African families seem to have been altered as a result of the social engineering and entrenching of settler colonial systems. Horwits (2001:111) concludes that “the effects of the absence of large numbers of men from their rural homes undermined rural family structures and household economies”. This absence of African men from their nuclear and extended families was largely instrumental in the operation of the South African capitalist economy. “Land alienation, rising taxes and a succession of natural disasters saw spiralling numbers of people entrapped in non-discretionary patterns of migration” (ibid., 111). Therefore the conclusion that is discerned from such an argument is that various forms of colonial strategies were used to destroy the family structures which had existed among Africans, and this contributed to the alienation of men from their families.

Dismembered Family Structures: The Role Of Colonialism In Dismembering African Family Structures

Where it has gone, colonialism, largely underpinned by the project of Western modernity has throughout history aimed to dismember the indigenous communities that have been held under its grip. The transatlantic slavery system and the general enslavement of people, the portioning and partitioning of African territories through the 1884 Berlin conference resolutions, and the resultant dividing of clans and families through unnatural borders across the continent all point to the violence of dismembering the African family (wa Thiong'o, 2009) by the colonial system and Western modernity. In reference to the deliberate and catastrophic impact of such dismembering on the African family structures by colonialism and modernity, Du Bois (1903:152) has indicated that "the wretched of my race [African] that line the alleys of the nation sit fatherless and un-mothered". Therefore whilst contemporary discourses continue to debate the root cause of these 'fatherless' and 'motherless' African children, in reference to South Africa, there are clear historical strategies that were employed to achieve this end. In this country, formal legislations were enacted to create a division (physical and emotional) in the nuclear family structures of Africans. These among others included colonial spatial planning in the creation of urban and industrial centres, the poll tax system; various legislations including, the Land Act of 1913, the Urban Areas Act of 1923, Native Administration Act of 1927 (Walker, 1990) as well as later apartheid legislations such as the Group areas Act of 1950.

The above legislations point to the several strategies that have been historically employed by various colonial-apartheid administrations of this country in the shattering of ancient African family structures across all its indigenous communities. Race induced poverty, migrant labour system, restrictions on people's movement, including the pass law system of South Africa, and lastly the village tax system (Ramphela and Ritchter, 2006; Peires, 1989; cf. Achebe, 2009; wa Thiongo, 2009; cf. Featherstone, 2003) all joined hands to disrupt and ravage the established African ancient family structures and cultures. For instance, Walker (1990:180) argues that beyond its polished language "'civilising the native' meant forcing the men into labour – not, however, for themselves, nor to unburden African women, but labour for Whites". In other words, the structure of the settler-colonial-capitalist project illustrates a manner in which colonialism 'was' used for the oppression, separation and manipulation of African families in the 'higher purpose of serving the interests of the colonising societies'. Therefore for the purpose of this paper, the main interest is on how a novel becomes the 'register' (historical and contemporary) of noting the dismemberments of the African in relation to his offspring's and immediate family members.

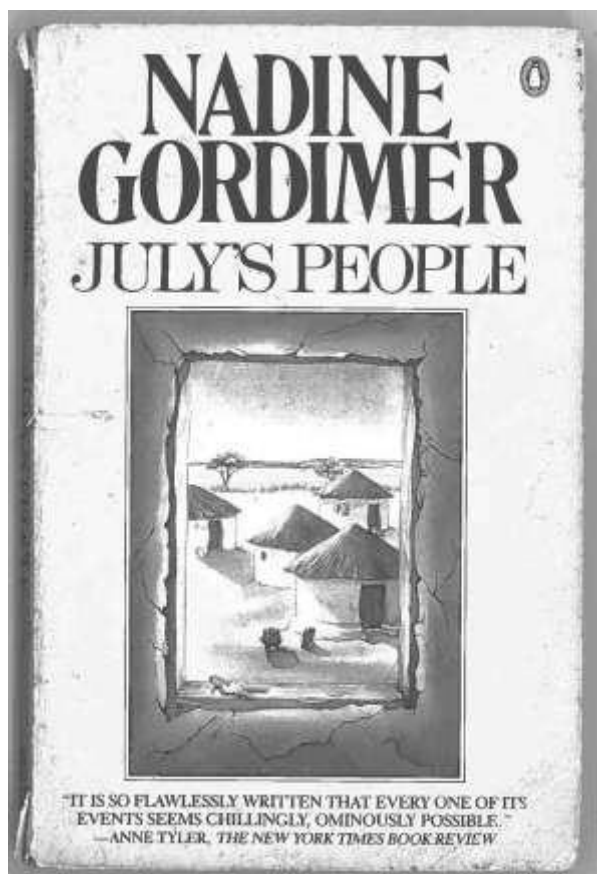


Fig 1: The cover of Nadine Gordimer's 1981 *July's People*. Whilst having analysed and studied by several scholars, the theme of family dismemberment has never been in examined in relation to this novel.

In this country's urban centres, Africans were only needed for the maintenance and servicing of settler conveniences (maintenance of settler's homes and settler urban centres). In relation to these colonial urban centres, Fanon (1961:30) once postulated that "the settler's town is a well-fed town, an easy going town; its belly is always full of good things. The settler's town is a town of white people, of foreigners". Thus it is a place where Africans did not belong but were simply accommodated for the purpose of maintaining the splendour and comforts of the colonisers. Ultimately, the very upkeep of the privileges of settler colonial towns has been historically maintained by the labour of the colonised, and the majority of whom 'had' been Africans in the case of South Africa. The upkeep of this colonial town had been steadily maintained through the migrant labour system that has 'historically' separated members of families, for extended periods of time. This was the general and lived reality among many colonised Africans. Memmi (1965:96) argued that "the colonised enjoys none of the attributes of citizenship, neither his own, which is dependent, contested and smothered, nor that of the coloniser". Thus the very migrant labour system that has historically dismembered African families marked the citizenship of the colonised African as that which is to be only attained in the 'native town' and Bantustans. The African therefore has been forced into the labour system because the colonised African under the logic of colonisation belongs in "the native town, the Negro village, the medina, the reservation...". In South Africa, all these medina's were created by various legislations, including the 1913 Land Act which went on to be instrumental in the creation of Bantustan as 'ghettos' for maintaining Africans and as reserves where native labour; uncomplicated by the burden of live-in family dependents; could be sought by settler colonisers.

Therefore the social commentary of the novel, its revelations of the excesses of settler colonialism, its manner of having a pulse on the colonised African and ultimately its narration of the African condition are what lies at the core interest of this paper. For this purpose, Nadine Gordimer's *July's People* is therefore used in the paper as a manner of understanding the impact of South African settler colonialism on the nuclear African family structure and the emotional relations among the members of this family structure.

On The Novel And Its Social Commentary Role

The re-structuring and control of the indigenous populations by European settlers in South Africa is what has been described by Tuck and Yang (2012:4-5) as "internal colonialism [which is], the biopolitical and geographical management of people, land, flora and fauna within the 'domestic' borders of the imperial nation" (ibid., 5). They further state that "in order for the settlers to make a place their home, they must destroy and disappear the indigenous people that live there" (ibid; 2012:6). In the context of South Africa, the very impact of settler colonialism in the African family structure can thus be seen and described as the very annihilation of the ancient African life. Thus migration to the settler town's by African natives through the process of migrant labour system altered the indigenous relations, harmony and co-existence among African families. Ramphele and Ritchter (2006:73) indicate that in South Africa "families were, in fact still are, affected by migrant labour and forced removals and, in particular, what was happening with men – disempowered, unemployed and uprooted – especially in relation to their families and their children". Therefore of additional interest in this paper, is how the narration of the author as well as the novel itself can act in the realisation and manifestation of social critiques of the colonial settler induced ills among the African communities.

Literature has suggested that the novel is an important social critique. In reference to the author of *July's People*, Chima and Ifeyinywa (2014) have argued that Gordimer was convinced that the novel and its fictitious plots and characters were the best tools "to transmit social truth, because all other forms [of writing] impose certain censorship or strings that make whole-truth impossible". This point was further advanced by Clingman (1981:165) who noted that "fiction gives history from the inside". In that argument, Clingman further noted that "the primary material which a novel offers: not so much an historical world, but a certain consciousness of that world" (1981:166). Thus the roles of fiction and more specifically that of the novel has been instrumental in the critique of social ills, including critiques that pertain to economic, cultural, social, as well as speaking to the moral fibre of concerned societies (cf. Kailash, 2012). Furthermore, the strength of the novel in settler colonised South Africa rested in its role as a social critique of relations between the colonised and the colonisers.

In the case of Gordimer, Nixon (1992:2) has observed that "Gordimer's South African experience taught her to be equally sceptical of a sense of creative obligation on one hand and, of view of writers as pure, individual sensibilities flying of ideology". Thus in this postulation, we have an understanding of Gordimer as a writer and intellectual who is keenly aware of the trapping of the novel and how the novel should not to be uncritically observed as a civic activist tool. Among some scholars, this later perception is seen to be a weakness of the novel. Whilst this may be a contentious case, Clingman (1981:169) has however argued that:

Each shift of consciousness in Nadine Gordimer's fiction is made in response to external developments and to the way in which these clarify the weaknesses of earlier positions; each therefore bears some significant relationship to the South African historical development as a whole.

Whilst aware of trappings of being pigeonholed into thinking along certain ideological lines as well as the limitations of having a single understanding of the role of a novel, in Nadine Gordimer seemingly we encounter a writer, intellectual and status quo critiquer that seems to be committed to the emancipation of the general population of South Africa. Chima and Ifeyinwa (2014:171) note that among her many thematic areas, Gordimer's novels have dealt with issues as diverse as "love and politics and the racial problem as they relate to South Africa". More than anything, the themes tackled by Gordimer have not only served to reveal the problems of settler colonised-apartheid South Africa, but the projection of the narrative by the writer has also honoured her moral obligations. For instance, Clingman (1981:166) concludes that "while Gordimer has throughout her career resisted any pressure to subject her writing to immediate political needs or to put her fiction 'at the service of a cause', her moral objective is instead those judgements whose vindication might, it could be hoped, be the verdict of history".

It is in this context that the focus of this paper is on the major theme of colonial dismemberment as played out in a novel that narrates the White and Black community relationship in the fictionalised last dying years of formalised settler colonialism of South Africa. Therefore in the sections below, the role of settler colonialism in the dismemberment of the nuclear African family is discussed through a thematic focus.

Thematic Areas Of Dismemberment In *July's People*: Colonialism, Absence/Erasure And Fatherhood

In the sections below, the focus is on the evidence as read from Nadine Gordimer's novel in relation to its role of registering and unmasking the African family dismemberment that had been caused by settler colonialism in South Africa. The discussions below reveal how the novel can act as: 1) the register of the continuities of settler colonially inscribed roles; 2) the reading of erasure as a form of family desertion; and lastly; 3) the role of the novel in revealing the underlying reasons of dismemberment in African family structures.

Continuities And Discontinuities Of Roles: July's (Mwawate) And The Smale's Family Approaches

From its very inception, the novel; *July's People*; starts the plot between July and the Smale's by highlighting one focal character of society under settler colonised South Africa, the conundrum of inequality in the structure of South African society across racial lines. In this sense, Gordimer in the opening lines of this novel states:

July bent at the doorway and began that day for them as his kind [colonised servants] has always done for their kind [colonisers] (Gordimer, 1981:1).

This observation is made in spite of the new role that July (Mwawate) finds himself in – as a host and benefactor of a stranded family that is a refugee from the fictitious revolutionary war situation that was grappling South Africa. Thus in his continuing role of being a servant of the white family, whilst also their host, the writer seems to underscore the long established relations among the colonised and the colonisers and how these are to be maintained even at the dawn of political independence from colonial-apartheid rule.

No knock; but July, their servant, their host, bringing two pink glass cups of tea and a small tin of condensed milk, jaggedly-opened, especially for them, with a spoon in it (Gordimer, 1981:1).

Whilst July (Mwawate) therefore maintains the role of being a host and benefactor to the stranded White family, from the opening pages of the novel, the old colonial relations between the native and the settler live on. This ambiguous role of July also illustrates the maintenance of the double consciousness that is always demanded from the humanity of the oppressed (Du Bois, 1903). This is also what Fanon (1961) has called the old acquaintance roles between the native and the settler. Whilst the native is resentful of the place of the settler in society, the colonial situation enforces the servant and master relationship (cf. Sonderling, 2014). In fact, the native, as illustrated by July's (Mwawate) continuing responsibilities is forced to be the perpetual guardian of the settler's positions and privileges, even if it means this role is fulfilled at the expense of being dismembered for periods of times from their own families. In *July's People*, this is expressed by July's wife, Martha who complains thus:

You used to write and say how you were looking after the house yourself – feeding their dog, their cat. That time when you were even sleeping inside the house, thieves came and broke the window where you were sleeping... (Gordimer, 1981:20)

Therefore, whilst settler-colonial logic expected July (Mwawate) to be subservient and of servitude to his employers, of additional interest in this article is how the question of dismemberment is continued even at a time when July (Mwawate) was expected to be re-membered to his family at the time of the liberation war. The role that July (Mwawate) plays for the Smale's in his village are the very continuation of the roles he used to fulfil in the house of the Smale's (running to the shops, bringing tea, worrying and taking care of their children). It is these very roles which have separated him from his own family, and the lack of detail about his emotional interaction with his own family indicate that dismemberment as a result of employment responsibilities continues for July (Mwawate) even at the time of being reunited with his own family. The novel also illustrates that, in some instances his own family is also caught in a situation where they need to partake and contribute in his role as a servant of the Smale's. The novel however indicates that such an additional role is done reluctantly so. His wife (Martha) for instance observes that she had:

Given up the second bed, borrowed a primus stove for them; watched him [July], in the morning, take the beautiful cups he had once brought her from the place of his other life (Gordimer, 1981:18).

So in this sense, July (Mwawate) remains a faithful servant to the settler-colonisers conveniences, especially in the maintenance of any semblance of urban life that they are mourning as a result of the volatile political situation that has gripped the country. Furthermore, throughout the plot of the novel, the role of July (Mwawate) as this faithful servant that is duty bound to love and care for the colonisers children becomes hyper-visible. Thus his continuing role as a worker of the Smale's, his caring and nurturing attitude towards the Smale's offspring and his overall concern of the wellbeing of that family juxtaposed against his presence in his village seem to call into question the value of physical presence among one's family under colonial conditions. Thus within the plot of the novel, the seemingly lack of care, concern and nurturing that is not directed towards his own family and children seem to illustrate a fictional story that registers continuities of dismembering even when African fathers are physical present among their family members.

Erasure As Desertion: The Absence Of July's Family Structure In The Novel

As indicated by Ramphele and Ritcher (2006) the impact of settler colonialism in the African structure was not only felt at the level of physical abandonment by African fathers. Rather, the emotional distance that had become endemic because of family member and family role unfamiliarity as a result of migrant labour system also became a form of abandonment. In relation to *July's People* as a novel, whilst the omnipresence of the Smale's is felt throughout the novel, one salient feature of this novel is how the 'other' people of July (Mwawate) have been erased and reduced to the background of the narrative. For instance, from the opening narration of the novel, the reader is acutely aware of the lives of the Smale's. Their choices in car colours, their family vacations, their past times, their children and even their career choices are present throughout the plot. Therefore they are visible and there, just like how settler colonial logic demands to be there in its naming and 'discovery' of every land, natural resources and landmarks of interests in the colonised world. In contrast to his own family, the novel only suggests that July (Mwawate) has been instrumental in the upkeep and maintenance of the family and 'his' people. In contrast to July's family life Gordimer (1981:6) in this novel further reveals the lives of the settler colonial family by writing that:

They stood round it [the car] indulgently, wife and family, the children excited, as it seemed nothing else could excite them, by a new possession.

Even though the discussion revolves around the unsanctioned purchase of a vehicle by Bam Smales; the White patriarch of the Smales; the over the top appearance of the colonial family structure in the very first few chapters of this novel further buttress the erasure of July's 'other' people. In this sense, the earlier absence of July's 'own' family structure also implies that July (Mwawate) is a possession of the Smales. By virtue of this absence, he becomes an extension of the Smale's worldly possessions, their cars, house, money and other household goods. This is further confirmed when Gordimer narrates comments of Maureen about the differences in *her* July's.

Furthermore, when it comes to July's family, names and intimate details of the family life are either delayed, suspended or missing entirely from the plot. For instance, Gordimer (1981: 15) writes of July's wife as being of "a small, black-black, closed face, and huge hams" woman. Once the wife is introduced to the reader, the novel moves to introduce the mother of July, and she is described as "an old lady" who is holding a nameless child. The child's only details are that he/she is "past the age of weaning [and] who [was] turning up in sleep on her [July's mother] own lap". Later in this chapter, a few sketchy details of the mother are provided. These include the details of her dress code "wore gilt drop ear-rings and a tin brooch" (ibid, 15).

Of further interest in this paper is that when family is initially raised in reference to July, it is done with the purpose of also exposing his infidelity with the "town women"⁵. The novel also indicates that "it was understood that July's responsibility was to his own family, far away". It was to a woman "never seen, [and], never imagined" (Gordimer, 1981:16). Therefore in this sense, July's 'other' people don't hold much direct importance or family structure visibility in the novel. In fact, the "distant" village family of July (Mwawate) remains an invisible and distant structure even when they are physically available in the narrative. Often spoken for by their intermediary; July; the family structure of July (Mwawate) seems emotionally absent from each other. They are not like the Smales. The people that the plot ensures that we know so much about. In fact, the title; '*July's People*'; seem to suggest that July's real people are actually the Smales, the people where he is a loyal servant to. It is only these people who seem to have a visible and emotional interest to each other.

Bam sang a comic song in Afrikaans for Royce. – Again! Again! – Gina wavered through a lullaby she had learnt from her companions, in their language. Victor became a raconteur, past, present and distance resolved in the tradition of anecdote...(Gordimer, 1981:79)

This warmth and love that is shared between the Smale's, even at their moment of frustration, dispossession and future uncertainty is in direct contrast to the distance that is observed from July (Mwawate) in relation to his own family members. Among their interactions, the lack of detail/minimalist detail into July's (Mwawate) family structure portrays a certain example of the impact of dismemberment of African family structures (cf. wa Thiong'o, 2009). As indicated earlier, when his family is introduced in chapter 3 of the novel, what we are faced with is a nameless and largely faceless family introduction. This un-naming of July's family is continued thus:

There were several others, young women and half grown girls, in the hut. His sister, wife's sister-in-law, one of his daughters; he introduced them with a collective sweep in terms of kinship and not by name (Gordimer, 1981: 16).

This statement comes immediately after July's wife and mother were introduced to the reader. Almost throughout the entire novel, the intimate details of geographically re- membered family structure among July's family members are lost. The novel portrays an existing family structure that is not sure of how to speak to each other, that is often suspicious of each other and that is defined by tension as a result of the fifteen year absence that it felt when July (Mwawate) went through the employment migration process. Thus in the entirety of the novel, the prevalent theme when July (Mwawate) returns to his village is the idea of absence even when he is present among his family members, including his children.

The Novel And The Underlying Reasons Of Absence: On July's Reasons

The theme of absence and dismemberment are central to this particular novel – *July's People*. More importantly, these themes reveal additional layers of anger and resentment on the part of those who abandoned their families in the process of employment migration that has been central to how settler capitalist South Africa operated and continues to operate.

Fifteen years I'm work for your kitchen, your house, because my wife, my children, I must work for them (Gordimer, 1981:72).

Whilst these words are uttered in the process of engaging about the car keys that July (Mwawate) has hogged, the most revealing emotion about them is the anger that is kept by those who abandoned their families in service of the settler colonial superstructure.

⁵ The term "town woman" has often been used to illustrate the migrant labour system and its resultant distate for women

It reveals a deep sense of resentment in how Africans such as July (Mwawate) have been forced to abandon their families, including their children in the process of forking out survival under settler-colonial conditions. Abandonment in the case July's character meant, long periods of absence, forced separation of family members, intermittent visitations, and often children growing up without the physical presence of both parents. Thus for July (Mwawate), this absence took place and is explained as follows:

He came home every two years and each time, after he had gone, she gave birth to another child. Next year would have been the time again, but now he had brought *his* white people, he had come to her after less than two years and already she had not bled this month (Gordimer, 1981:134).

Overall, July (Mwawate) had been absent for about fifteen years, and in this fifteen year employment period by the Smales, he only visited for short periods of time in every second year. Ultimately, his character situates him among the many African fathers (and later mothers) that had been dismembered from their families as a result of employment migration restriction that had been enforced by colonial-apartheid South Africa. These man [and later women] who had travelled to the centres of settler colonial spaces in the major cities of colonial South Africa, never really had the chance to look after their own families, except only as financial providers. This is illustrated by how July (Mwawate) always had a child immediately after he migrates back to the city. Thus, the children of migrant workers, as exemplified in the case of July (Mwawate) did not grown up with both parents under a single homestead. Instead, they occasionally saw their parents on a seasonal basis, if at all. The non-presence of the migrant workers was also felt at the level of intimate partner relations. For instance, Gordimer notes that:

She [Martha, July's wife] was not used to having him present to communicate with directly; there was always the long wait for his answering letter, a time during which she said to herself in different ways what it was she had wanted and tried to tell him in her letters (132).

In essence, the traditional structure of the settler colonial migration policy meant that women were often required to be based in the homelands/Bantustans whilst men were meant to be in the cities. This often complicated relations with intimate partners as a result of the long absences from spouses. In the case of this novel, this complication is underscored by how Martha finds it difficult to relate to July's (Mwawate) presence. Furthermore, the extended absence of male spouses meant that they were accused of having grown distance to some of the protocols of African village life. In their conversation, Martha remarks for instance to July (Mwawate):

She [July's mother] said it was time. The grass was right. She wanted to cut before the other women took the best. I can't tell your mother she mustn't do what she wants. I am her daughter, I must help her. *Perhaps you have also forgotten some things* (emphasis added) (pg 133).

This is because...

You [July] have [had] to learn all their [colonisers] things, such a long time. When you go (pg 133).

Whilst the idea of dismemberment has been central to African families since the inception of administrative and settler colonialism in Africa, the novel also illustrates that in some instances, such families could not be entirely disfigured. Seemingly among some of these families, there was a fighting spirit that was ready to germinate and remember its family structure. Or rather there is a longing for being re-remembered with one's own blood relations. In the case of the novel, this illustrated by the following statement:

After the fighting is over, perhaps you can stay here. You said the job was finished. If we get more lands and we grow more mealies...a tractor to plough...Daniel says were going to get these things (pg 135).

Overall the idea of absence as generally outlined in this novel illustrate that dismemberment as a result of migrant labour 'was' felt most at the level of a family structure. From the difficulties of relating to one's children, spouse and ones duties, the overall impression as illustrated by the novel is that settler colonialism was instrumental in the disintegration of the African family structure. The failures of relating to one's family by migrant labour patriarchs often meant that the cultures of African family dismemberment were planted and these germinated as a result of settler colonial planning.

Conclusion

In this paper, the overall objective was to distil the role of the novel in the process of being a 'register' of dismemberment as experienced by colonised African men. The paper grapples with how this dismemberment manifests itself in the overall plot of the novel. Surprisingly the theme of dismemberment as tackled by Gordimer's *July's People* has been understudied by literary and cultural studies scholars. Therefore as ascertained from the thematic areas that have been discussed in the paper, the overall conclusion is that the themes of duty as a commitment to settler colonial families, the abandonment (physical and emotion) and lack of caring for ones family as well as the many reasons of absence all contribute to the culture of on-going dismemberment of African family structures. Thus the most salient factor about this novel is that in its closer inspection, the continuities of African dismemberment can partially be historicised from this very novel.

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1968, EDUCATIONAL ENTREPRENEURS AND CRITICAL THEORY: WHY NOT THE BEST?

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ABSTRACT

The year 1968 forever floods through the consciousness of American Baby Boomers. Robert Kennedy's question from that fateful year, "some men see things as they are and ask why, I see things as they are not and ask why not?" helps to power that flood. Even today, Boomers of good conscience who are American educators continue to ask: "why not?" Why not throw out the systems that leave our country's educational achievement stagnant, or even dropping? Why not wash away the old and develop new approaches to 21st century education? Critical Theory (CT), like Kennedy's credo, is a liberation doctrine for students and educators alike, that requires educational leaders to see things as they are not and to pursue non-normative solutions. CT's macro evaluation of our educational systems may serve as a strategy for educational leaders who seek new paradigms for reform. Educational entrepreneurs, unlike most educators, take risks and are creative, they behold the future and they ask why not. By utilizing critical theory as a pathway, entrepreneurial educators could then have both the courage as well as the means to change the American education system. After 50 years of trying so many other paths, why not let Critical Theory guide our way?

Keywords: Educational entrepreneurs, Critical Theory, creativity, risk aversion, liberation

THE EDUCATIONAL EXPERIENCES OF TEACHERS WHO DEAL WITH CHILDREN OF REFUGEES, ASYLUM SEEKERS AND MIGRANT CHILDREN ON THE MOVE IN TRINIDAD & TOBAGO

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Carlos was only eight years old when he reached to Trinidad. 'I want to go back home.' He thought, 'If I could I would...but there is no home to go back to anymore.' The child remembers the pangs of hunger that made him feel dizzy and weak. He remembers what used to be; their comfortable house, a car that their father would drive, being able to go to the beach or movies...being happy and free. Then one day, it changed, there was no more food, no water, no medicine, no electricity...nothing but bitterness and strife...the child remembers his mother saying, 'We have to go somewhere better now...somewhere that we can find food to eat, a place where we can get some money to send back home'. Vaguely, the child remembers leaving his little sister behind with the promise that she would join them soon. Tears streamed down his face, the pain was no longer from hunger...it was from the hurt of not knowing when he would see all his family again...so many loved ones left behind, and him leaving with no knowledge, and a fear of what the future held for him in a strange and foreign land.

He reached to Trinidad; he had been told that it was an island of all 'creeds and races', maybe there was hope after all. Three years later, he knows no peace, his mother cries herself to sleep every night. There is no one to protect them. Three years and he has not seen his little sister. He lives in the depths of poverty, his mother is not allowed to work. They share an apartment in an unsafe neighbourhood with ten strangers. Ten people that speak his language, but that's the only thing they have in common. He remembers his dreams of becoming a doctor. Those dreams faded daily- they seemed like the hopes of a foolish, naïve little boy, who could no longer be- eleven was the age of a man that could help. It was his duty to return the smile to his mother's face. How could he become anything though when he wasn't even allowed to go to school? Why would they deny him an education? - A basic right of all children- Actually, why would they threaten to send them back home? Nothing made sense to him. He yearns for the days gone by.

He lived in a world where he had no future, denied an education, what was he expected to be?-This was his world, his reality; there was no sympathy, no hope, no humanity.

Carlos is the embodiment of many asylum seeking and refugee children that have reached the shores of Trinidad & Tobago seeking help, betterment, the rights of a child to eat, to be safe and happy, to live; the right to learn.

Aim

The aim of the research was to document the experiences of teaching staff engaged in creating alternative learning spaces for migrant children. It was important to investigate the circumstances surrounding the lack of legislation in Trinidad and Tobago regarding rights for refugees and asylum seekers, and how this lack of rights affects educational opportunities for this population of concern (POC).

Political & Social Context & Background To The Problem

To provide some background and context; in November 2000, The Republic of Trinidad and Tobago acceded to the 1951 Convention on the Status of Refugees and its 1967 Protocol (Government of the Republic of Trinidad & Tobago, 2016). The government drafted a document entitled "A Phased Approach towards the Establishment of a National Policy to Address Refugees and Asylum Matters in the Republic of Trinidad and Tobago" (2014). Although the unravelling situation in Venezuela, has affected T&T drastically the government has adopted an 'officially' neutral stance, and not taken political sides, while failing to institute any local legislation or administrative regulations on asylum or refugee status. Trinidad has still not established a national refugee status determination procedure. (Bureau of Democracy, Human Rights and Labor of the United States Department of State, 2016). The Venezuelan crisis and Cuban political and economic situation have contributed to a dramatic rise in the number of asylum seekers and refugees reaching to the nearby shores of Trinidad & Tobago recently (Wilkinson, 2018). But it is not only these nationalities that have requested

asylum. Trinidad has also seen asylum seekers from Russia & Pakistan, from Syria since 2011, St. Lucia and the Dominican Republic and temporary visiting migrants from Dominica.

The borders of T&T are porous and relatively unprotected, allowing for constant new arrivals. Phillips (2018) reported, '160 arrivals everyday'. This influx has placed Trinidad in a position where educational practices, among other factors, need to be more closely examined, since the lack of legislation and the immigration laws do not provide an adequate legal or operational framework for refugee protection and asylum issues. Simplified, the migrant population does not have the right to work, to an education; or any other legal rights in Trinidad & Tobago. Poignant is that the average Trinbagonian seems unaware of the real needs and plight of the POC (Scruggs, 2018). There are many uncertainties and negative impacts, since T&T is considered to be a transit point and not a settlement zone for people on the move. Trinidad's close proximity to Venezuela, coupled with its small population has resulted in the country retaining one of the largest Venezuelans per capita. The island nation remains the only country to take in large numbers of Venezuelans without having an official asylum policy in place (Hamilton, 2019). The local government carried out a two-week registration process in June 2019 that attempted to address the issue by granting Venezuelans photo IDs, a six-month to one-year work permit and basic medical care. It was the first major action, and a sign of good will in addressing the spike in migration that began about five years ago, and more than 15,000 Venezuelans registered. However, many questions remain unanswered, including what will happen to new Venezuelans who arrive after the registration process, whether permits will be renewed once they expire, and why there still isn't an official asylum law granting refugee status. Noteworthy, is that Cubans who up until mid-2018 made up the majority of the asylum seeking population in T&T, were not given the same option to register. (Matroo, 2018).

Asylum-seekers can only receive refugee status through the NGO Living Water Community, the UN Refugee Agency's local implementing chapter in Trinidad, which coordinates the application and approval of asylum status. This process has created a 'disconnect' between the United Nations approving asylum status in a country that doesn't dictate how to address refugees (Hamilton, 2019). After the amnesty opened up, Minister of Education, Anthony Garcia on the 06th June 2019 emphasised that 'educating migrants was not a priority' (Matroo, 2019). Mere hours later, the Prime Minister proclaimed, that 'Government would not prevent Catholic schools from educating the children of Venezuelan migrants.' (Paul, 2019). This could be read as mixed signals since the PMs statements directly contradicts local laws as these students still do not have the right to 'student permits'. The crisis needs to be managed and policies and laws, put in place to allow a measure of control with some clear cut guidelines. Arguable though is that the refugee and asylum situation is very new to the English-speaking Caribbean region, and one can understand that being faced with a new situation, the government may simply not know how to manage this situation.

The Statement Of The Problem

Migrant children in Trinidad & Tobago are simply not recognised. There is no law allowing them to attend schools. Even if exceptions are made to accept them into the physical classrooms, then there is still no legislation giving them the right to a student permit, the right to do national exams or to get certification. They are the invisible children lost inside a web of red tape, bureaucracy, xenophobia and intolerance. Teaching staff that facilitate these children are doing a charitable, humanitarian work and covertly finding means of assisting these youngsters while subtly and quietly advocating for positive change.

Research Question:

What are teachers' experiences related to teaching children of refugees and asylum seekers in Trinidad & Tobago and what important points emanating from their experiences can inform the wider Trinidad & Tobago society, including the government, on how to cater to the educational needs of this population of concern?

Method and Methodology

The paper highlights the views of 29 teachers and volunteers who spent the past 20+ months trying to find alternative educational solutions for learners who are not allowed to enter the mainstream of schools within Trinidad & Tobago. The study is based on mixed methods with the research questions targeting both the quantitative and qualitative paradigms. Participants were selected through purposive sampling with the focus being on recording an unfolding phenomenon of migrants rapidly entering, and their engagement related to educational processes in T&T, from the perspectives of teachers. The study was therefore based on phenomenology which fit well into the 'exploratory research design' and mainly qualitative method

The main research instruments were online survey questionnaires, and semi-structured focus groups. I followed Miles & Huberman (1994) suggested steps of: 'data collection, data reduction, data display and conclusion drawing'. Then as

aligned with the phenomenological approach which attempts to derive understandings of collaborators' experiences, prominent themes and patterns were sought out, and the participating teachers' voices presented in the final write-up.

A Look At The Findings

Finding 1

Teachers of the TLC felt that the terms asylum seeker, refugee and migrant were mere labels and terminology that made assisting more difficult. They felt the terms created more red tape and bureaucracy, preventing children from accessing educational services. The literature showed that the terms all mean something unique and gives varying status to each, however when asked to define, teachers came up with the following:

- a) Refugee, asylum seeker, migrant- they all mean the same to me- children who have been left without a home or community support
- b) Children who have no one else to turn to and they come to our country seeking help
- c) Children does not mean only persons under 18, it means any vulnerable youth that needs assistance and need guidance for their futures
- d) At the end of the day a child is a child no matter where they come from so we should not be labelling them. Give them a chance to integrate.

Finding 2: Teachers Are Emotionally Vested In Teaching Children Of Concern

Spoken with a profound genuity, the educators mentioned that the dedication they give to their job, and the care they give to the students at the centre is even better than that given at quality private schools. Interestingly, all teachers used words that showed deep affection for students. Teachers repeated in focus group discussions more than 120 times combined, 'words like, 'care, like', and 'love'- when describing how they felt about learners. They referred to the learners as 'my children'. Some confessed they found it difficult to not be affected by their students' plight and situations, and often spent time outside of teaching hours trying to find ways to assist students who confided in them about their challenges and problems Teachers admitted going beyond the duties of a teacher, as they felt responsible for the overall well-being of the students.

Finding 3 Teachers Levels Of Preparedness

Asked about their level of preparedness for teaching migrant children, many teachers described their experience as unique. Even those with over 10 years' experience explained that no amount of teacher training was enough to prepare them to help these learners to succeed. Wirén (2013) pointed out that 'Teachers of migrant students feel less well prepared to teach'. An experienced teacher, emphasized that any educator wanting to work with migrant children needed to be 'Extremely versed in the particular subject area that they taught, they needed to have much patience, consistency and dedication'. Teachers believe that training was essential for dealing with the emotional and mental well-being of the learners, and felt that training in curriculum development should have come early, since they worked on a trial and error basis, often having to tweak teaching strategies, and build materials and lessons from scratch to reach the majority of learners. Save the Children (2019) argues that 'Without the right training and support, some teachers of refugees may misinterpret students' behaviours possibly leading them to use teaching styles that are insensitive to refugee children's needs and create the opposite of a healing classroom'.

The majority of teachers reported believing that POC students didn't have 'unique needs', in fact all participants agreed that students wanted to be treated 'normally', 'like any other young person his /her age'. The kids did not want to bear the stigma of being a 'refugee child'. Hollander et al. (2016) said it aptly, 'I fear putting a vulnerable group into a more stigmatized situation'. Teacher M said, 'They do not have unique needs, yet teachers need to account for their unique situations and backgrounds, and create flexible classrooms that can reach all their unique personalities'.

Finding 4: Teachers Experience Frustration And Desire Change

Teachers felt that there was a need to raise overall awareness about the background and complex needs of the asylum-seeking children, and to promote a culture of acceptance. These kids were described as feeling 'unwanted' and 'invisible' by teachers who felt that there was a deep separation and that xenophobia existed. They recounted how their pained learners spoke about being harassed and called names by the common folk on the streets. However, they confessed that due to 'child protection issues' they were not allowed to speak about their jobs, the centre or the population they work with. They sometimes felt frustrated as it seemed their entire existence was shrouded in secrecy. They felt powerless as they might hear outsiders discussing the local population and making baseless comments, but they could not correct them or comment. Importantly, teaching staff also acknowledged that some Trinbagonians proved quite generous and

empathetic towards the POC children. Many (through word of mouth) were moved to offer tangible contributions in the form of donations and time.

Finding 5-Teachers Want To Be Heard And Be A Part Of The Decision Making Process

Teachers and the Principal at the TLC expressed frustration that their suggestions are often disregarded. The TLC reports to a series of larger organizations. Teacher L said, 'We don't want to sound bitter, but we often have people making decisions without asking for our input. More often than not, it's the wrong decision. Another teacher added, 'We are the ones that work with the kids at the centre. We know what works and what does not. Some people sit in offices far away and make all the decisions'. Hodges (2018) reported similar sentiments echoed by Teachers in Washington who feel that governing bodies have had too prominent a voice, and believe that they themselves should have much more input in decision-making'.

Finding 6: Teachers Want Long Term Planning And Consideration

Apart from teachers of the infant's level classes, all other teachers felt that students had a sense of 'immediacy' and 'rush'. They show extreme impatience. Teacher R explained, 'They seemed to live only in the present, the here and now'. They always act as if everything is temporary. Maybe that comes from not having stability...I mean, they change homes nearly every few weeks, so that might explain why they don't feel they need to have 'long term plans, or long-term goals.' Teacher T added, 'What can we expect from kids that have lost everything? Maybe they are afraid of forming attachments to anything'. Related to more strategic thinking, teachers felt that the short-term planning for learners with a budget and considerations that spanned only 3-6-month periods was an injustice to all. Learners could not settle into a routine. Teachers would be constantly unsettled, planning for two scenarios-one that catered for closing the centre at any given moment that the budget or planning team decided, and another; if the centre kept running. The dynamism was described as 'hard to humanly keep up with'. Teacher T pondered, 'How can I ask my students to have long term learning goals when I can't even guarantee them a place to learn for more than a few months at a time?' This 'instability' negatively affected teacher and students' attitude and morale.

Finding 7: Teachers Recognize Some Obvious Barriers To Learning

Teachers were particularly startled by students' fear of persons in authority, like police or immigration. Students had confided in them that they were afraid to go anywhere as they were scared of immigration. This was a major deterrent in their moving around and even affected their attendance at the centre.

Financial issues posed barriers to learning. POC children, according to teachers, tended to move from area to area, searching for the cheapest accommodations. This contributed to frequent absenteeism, adding to the disruption of learning.' Teachers noted that some parents needed their child to contribute to the family's income instead'. Poverty and economic suppression were magnified in the kids letting teachers know that they had nothing to eat at home and divulging that they looked forward to coming to school since teachers wouldn't let them go hungry'. Another crucial observation is students frequently needed to take care of very young siblings who were too young to attend classes, and sometimes had to take on the role of breadwinner to assist. Lack of money meant students using torn shoes, and clothes that did not fit, contributing to students being hyper sensitive about their images. Furthermore, there were children as young as 11, who teachers said were rumoured to have left the centre to work, some at food outlets, some at bars and some young girls were reported to be engaged in 'sexual activities' for money. Oftentimes there was no way to prove that the kids were being taken advantage of or exploited.

Finding 8: Teachers face many challenges in their service to POC children

Teachers believe it is essential to create support programs to help migrants and their children feel welcome and integrate into local society. They spoke of creating safe havens for and preparing ongoing programmes to receive new arrivals and giving them an induction into Trini society. Teachers identified that learners had limited English language proficiency, even though some had been in T&T for nearly four years, mainly because they were embarrassed and spoke English only when forced to. Save the Children (2019) advocates for support in language skills as 'essential, as it holds the key to refugee children accessing past learning, keep learning in new classrooms, integrating and recovering'. Further displays of unwillingness to immerse in the local culture emerged when teachers offered local dishes as a part of the lunch services. Teachers reported that 70% of the POC children refused to even try them. Rooted in Eisenbruch's (1988) postulation

that, ‘Uprooted children may experience powerful grief in response to a loss of culture’, teachers understood that though they wanted learners to adapt to the Trinbagonian culture they had to be careful of depriving them of their home culture, they realized learners opened up, gravitated and showed more confidence if teachers showed interest in students’ cultures. Other barriers included Interrupted Schooling. Students of the same age groups came in with varying levels of knowledge, causing challenges in placement. They described having secondary-aged students with the academic level of a primary school child. Teachers observed that those students became disheartened if they worked alongside younger groups.

Teachers also voiced concerns that lack of formalized and recognised education affected students’ willingness to learn and contributed to low teacher morale. Although students said they ‘liked the centre’, they were not interested in academics. One teacher recounted asking the kids their objective for coming to school, they responded, ‘to see their friends’. Asked if they didn’t want to learn, the response: “Why teacher? So I could end up cleaning somebody’s house?”- It doesn’t make sense getting good grades, because we can’t graduate anyway’.

Finding 9: POC Children Lack Social Skills And Opportunity For Socialization

Of the same teachers who expressed caring deeply for learners, 80 % of them noted that many students displayed lacking social skills and some anti-social behaviour: Some Examples are: Some students, regardless of age used ‘obscene language’ as a norm, and responded rudely when spoken to, though they were corrected. Generally, students did not pay heed to reprimands, using the excuse of “having a hard life” as the reason for not needing more rules. Teachers also reported some students ‘verbally’ bullying or threatening others and being territorial in 60% of classes; in upper primary and secondary levels. Teachers intervened. If this did not work they called in parents. Pointedly, 100% of teaching staff expressed disbelief that most parents did not think their children were culpable. Instead, rationalizing why it was okay for their children to threaten others. Hymel et.al (2005) describe this reaction as, ‘moral disengagement’.

Finding 10: The Issue Of Health

Teachers worried that students frequently reported being ill, Seeing that there is no official ‘surveillance system to monitor disease trends among newly arriving refugees into the country, teachers felt a definite and urgent need to have a proper monitoring mechanism and support system for health services for these children.

Finding 11: Teachers Advocate For A Proper Framework.

All personnel at the TLC agreed that having an overall solid plan, a good defining framework, and or educational model on how to educate POC children was crucial. It was important to tend to the immediate, short, medium and long term needs of the children.

Finding 12: Most Importantly Teachers Worry About Their Learners Having Prospects

They worried about the kids not being able to integrate into and be a productive member of local, or any other society. Teacher ‘N’ questioned: What choices are we giving to these children? What tools are we providing them with? If at the end they have nothing concrete to show, are we doing an injustice to these kids?

To end I want to leave you with some sobering statistics that I hope, provide further context regarding the ramifications of failure to acknowledge the existence of a refugee presence within society.

- Millions of children are being robbed of an education simply because of who they are or where they live, deprived of learning because they are caught up in emergencies, face extreme poverty, or are discriminated against because of their gender, disability or ethnicity. The world’s most vulnerable and excluded children are missing out on education.
- Today, nearly 400 million children of primary school age cannot read or write.
- More than half of all three to six-year-old’s have no access to pre-primary education.
- About 10 million refugee children risk having their learning interrupted after being forced to flee their homes
- 25 million children will never enroll in school – and two-thirds of them are girls.

Without a quality basic education, children are unlikely to escape the cycle of poverty and may never fulfil their potential. Understandably, we may be cautious, if not skeptical about accepting outsiders into our communities; however it is necessary to consider how we can have guidelines, measures and safety precautions in place and find the right balance where we can join caution with humanity, kindness and proper procedures. As a nation, it is important to recognize that inaction is not a course of action and question how Trinidad & Tobago can avoid adding to these already staggeringly high numbers (Save the Children, 2019). After all, as(Bausells & Shearlaw, 2015) put it ‘No one leaves home if the hurt that will come is greater than the hurt that they will leave behind’.

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TEACHING THE HOLOCAUST THROUGH STUDENT-BASED DOCUMENTARY: FINDING MATILDA-BY STUDENTS, ABOUT A STUDENT, FOR STUDENTS

SUSAN CARDILLO

ABSTRACT

Recent research has reported that two-thirds of American millennials have vague knowledge of the genocide of World War II. Twenty-two percent of millennials said that they have never heard of the Holocaust or where just not sure (Zauzmer, 2018).

Currently, three states-Florida, Illinois and New Jersey require Holocaust education from grades K-12. California, Michigan, New York, Indiana, and Rhode Island require genocide education in high school. (Jewish Telegraphic, 2017). There are also 20 states in the legislative process of making Holocaust education mandatory.

This state, Connecticut has recently passed the necessary laws to make Holocaust Education mandatory in public schools.

Armed with this knowledge we set out to create a project, a documentary, to help students better understand this horrifying part of our history on terms that they can identify with. By creating a documentary by college students, about a college student, for college students we set out to teach the Holocaust.

This documentary is about a young college student in the midst of war. Her name was Matilda. Myself and four University of Hartford students travelled to Lithuania in the summer of 2018. We followed a team of archeologists and geoscientists in the search for both the story and the grave of Matilda (which has never been found).

This documentary and paper take the audience on our journey. We were able to interview witnesses and locals who knew the family. We visited the church where the diary and poetry were found, after being hidden by a local priest for many years. We were involved with GPR (Ground Penetrating Radar) that was used to search for her remains. We were joined by students from the University of Wisconsin on our search

Through Experiential, Digital Media and Project-based learning we created a project to help millennials better understand history.

We are using this three-prong approach to teach an understanding of the Holocaust through our journey to Finding Matilda.

Why

According to Zauzmer(2017), is that fifty-eight percent of the millennials surveyed said that they believe that something like the Holocaust could happen again and that they believe there should be more education on the subject.

In her course, *The Holocaust in History* at Marquette University, Professor Rebecca Wittmann recalls, “the Holocaust was a completely new encounter (for most students in my course), it was an eye-opener, something of a shock to the system about man’s inhumanity to man. They were earnest, engaged, and horrified....” (Wittman 2012).

There are a number of countries who maintain laws requiring the presentation of information concerning actions of the government of Germany regarding Jews in its territory during the period of that government's control by the Nazi Party from 1933 to 1945. In the United States, laws of this kind are maintained by individual states. Currently, three states-Florida, Illinois and New Jersey require genocide education from grades K-12. California, Michigan, New York, Indiana, and Rhode Island require genocide education in high school. (Jewish Telegraphic, 2017). There are also 20 states in the legislative process of making Holocaust education mandatory. Our state of Connecticut recently past legislature to make Holocaust mandatory in public schools.

The Documentary

Finding Matilda is a documentary project about a young college student named Matilda Olkin. Matilda was a rising poet who studied languages at the University of Vilnius in 1941. Matilda was Jewish. She also kept a diary that was hidden for years after her death, by a local priest. The diary speaks of the life of an average young college girl. Matilda wrote of being in love with a boy, who did not return her feelings. She describes arguments with her siblings and parents.

And she also discusses her ideas about the war and how it was affecting her. In early 1941 the war had not yet reached Lithuania but it was closing in. From Matilda’s diary we can see that she was similar to most college girls of any generation. The story of Matilda’s death is a difficult one and the exact location of her remains were never found.

For the filming of this project we traveled with archeologist, Dr. Richard Freund and geoscientists, Dr. Harry Jol and Dr. Phillip Reeder. Armed with Ground Penetrating Radar equipment, maps and the promise of interviews with survivors and those with first hand knowledge we travelled to three parts of Lithuania looking for answers.

This is a three-prong teaching/learning experience.

- First watching the 10 students retrace the steps of a fellow college student was a worldly education that could never be found in a book. We visited the University of Vilnius and spoke to professors there. This paper will look at the importance of applied(project- based) learning, experiential field study and personal connection as a learning tool for students.
- Once we returned from Lithuania our students began the editing/research process. There is so much to learn and absorb in this story. This would be considered the “reflection” part of their experiential learning process. We wanted to make sure that the story unfolded from the “students” point of view-both Matilda’s and the filmmakers. Here the research will focus on how project-based research, digital media and film editing to increase the learning experience and knowledge of the subject.
- The final step will be to share this documentary with both College students and the Connecticut Public School system. The hypothesis is that students will see this film as a millennial history lesson. Using digital media as a tool will not only enhance the learning experience/exposure but it will engage the students through the story. They will learn the story of Matilda (a college student, just like them) as they learn the history of the Holocaust and what happened to the Jews of Lithuania.

Experiential Learning:

First, we will look at the Experiential Learning Theory. This theory draws from the work of scholars such as, John Dewey, Jean Piaget, Carl Jung and others who insist that experience takes the central role in human learning and development. Experiential Learning Theory is defined as “the process whereby knowledge is created through the transformation of experience.

Knowledge results from the combination of grasping and transforming experience” (Kolb, 1984).

When experiencing the moment, learning is maximized because it is active, engaged, and collaborative. Actual experiences allow students opportunities to connect theory and practice. Experiences also allow students to learn in unfamiliar contexts, to interact with others unlike themselves, and to practice using knowledge and skills. (Ash and Clayton 2009)

Through the work of philosopher John Dewey (1959), and his Laboratory School at the University of Chicago we understand that students will develop personal investment in the material if they engage in real, meaningful tasks. Learning research has shown that the most effective learning occurs when the learning is embedded in an authentic, real-world context (Krajcik & Blumenfeld 2005).

We found this to be true in the experience the student had by travelling to Lithuania. We began in Vilnius with a trip to the Great Synagogue as well as Vilnius University.

The Great Synagogue was the oldest and most significant monument in Lithuanian Jewry. Considered the “Jerusalem of the North” until it was destroyed during World War 2. We joined the team of archeologists as they worked on a current project (begun in 2016) to unearth the original synagogue which dates back to 1633. In preparing to understand the life and heritage that Matilda would have experience during her time in Vilnius, they decided to not only take footage and conduct interviews here but also to help in the digging. They were able to interview the head archeologist and director of Excavations, Surveys and Research Department of the Isreal Antiquities Authority, Dr. Jon Seligman. Dr. Seligman gave them an oral history of not only the synagogue but also about the life of Jews in Lithuania. This gave the students a good foundation to move forward with on their quest to learn more about Matilda.

We next visited the University of Vilnius and spoke with History Professor and expert of Early Modern Jewish History, Dr. Jurgita Verbickienė. Dr. Verbickiene told us of what life was like in Vilnius during the early 1940’s. She also gave us a tour of the University and shared stories of what life was like for Jewish college students during that time.

Dr. Verbickiene is also involved in a program entitled, Memory Diplomas. This program is working to give posthumous diplomas to those Jews who were either removed from or were killed due to the occupation during WW2. We spoke with her about have Matilda receive this honor. We shared what we knew about Matilda and Dr. Verbickiene was able to find her in the archives and has put her into the process of receiving this honor. The students were thrilled to know that they were, in part, responsibility of getting Matilda her diploma- the goal of every college student.

We next travelled to Rokiskia, Lithuania, which is the area where Matilda grew up and ultimately died. The students had the opportunity to interview survivors, historians and neighbors of Matilda. Something serious and unexpected happened during these interviews: The students became aware that Matilda’s murderers were not the Nazis that they were expecting, but her own neighbors who were carrying out the wishes of the Nazis. These people were called white arm-banders and they were talked about as “unfortunate collaborators” in the war effort.

Historically when we imagine the Holocaust, we think of the horror of the gas chambers and the torturous life in concentration camps. But things in Lithuania were different and our students received quite a history lesson from those they interviewed. Lithuania was under Russian occupation during the 1940 time period. As history will tell us Russia and German had a non- aggression pact. But in June of 1941 Hitler broke that pact and invaded Russian occupied territories. The build-up to this was brutal for the Jews. The whit arm-banders were anti-Russia so they were, at first, sympathetic to the Germans. Jews became the scapegoat for the suffering under Soviet rule. This led to the mass murder of Jews in many parts of Lithuanian. These murders were carried out in killing pits. They would line the Jews up, make them take of their clothes (which they would take for their own) and shoot them as they would fall one on top of the other into the pits. Many of the shooters were neighbors of the Jewish people that had all lived in the community together. This was a shocking surprise to the students. As they heard interview after interview telling

stories of this time, it became clear that it was all true.

In Rokiskis the students visited the place that was Matilda's home, the train station where all of the Jews of the town were rounded up and the stable that Matilda and her family were ultimately brought. Through interviews and research, we found out that the white-armbanders were rounding up all of the Jews in the area. Matilda was away at college (in Vilnius) at the time.

Matilda hear of this and took the first train home. Once there she too was taken to the train station. Then, Matilda, her parents, siblings and an aunt and uncle were separated from the large group and taken to a stable. It is surmised that the hoodlums believed that the Olkins had money and they wanted it. When their captors realized that the Olkins had nothing they blindfolded them, took them by horse-drawn carriage to the woods, made them strip down and shot them, one at a time. We know this because there was a young girl who live on the farm near the edge of the forest and she was a witness. This young girl is now in her 90's but is still alive to tell the story. Our students traveled to the barn, and from the barn to where the research pointed to the killing site. This is where the archeologists began their work. After days of clearing and mapping out the area, led by Dr. Harry Jol, the GPR(Ground Penetrating Radar) began. After 3 days of GPR work on the site, the results were in. We found the bodies. We found Matilda.

The students were overwhelmed with happiness, sadness and a sense of relief. They went to Lithuania with the mission of Finding Matilda, and they did.

Reflection

Research/Editing:

Learning, and understanding the learning process, does not happen through experience alone. The learning experience also requires thinking about what you have experienced and reflecting on it. Stanton (1990) reported that when students reflection on an experience is weak, "learning" may be "haphazard, accidental, and superficial" (p. 185). When the reflection is strong it promotes significant learning, including problem-solving skills, higher order reasoning, integrative thinking, goal clarification, openness to new ideas, ability to adopt new perspectives, and systemic thinking (Eyler & Giles, 1999; Conrad & Hedin, 1990). We saw this clearly during the research and editing process of Finding Matilda. Dewey (1910), defines reflection the "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 6). As the students began to review the footage they found that much more research needed to be done.

Through consultations with historians and professors they were able to begin to piece together their work. Schön (1983) emphasizes that there is a link between reflection and action. It is the interweaving of thinking and doing that creates the best results. He states that one who "reflects on the understandings which have been implicit in [one's] action, which [one] surfaces, criticizes, restructures, and embodies in further action" (p. 281). Critical reflection creates deeper learning. By considering research/editing as a reflection, students were able to take what they learned in the field and create a deeper understanding of the subject matter as well as the person-Matilda.

Upon our return to the United States the students began to comb through the footage. Interviews, site markings, b-roll, the entire experience was laid out on their computer screens. Now, to put it all together. We first sat down and created a working script for narration. This took hours of effort on all of our part. We needed to look at it as both a historical project and the story of a young college girl. We decided to have the students that were on the trip with us create some of the narration themselves. We asked of their experience and how it affected them. This was all brought into the script.

During this time we also worked with Dr. Avinoam Patt, professor of Modern Jewish History at the Maurice Greenberg Center for Judaic Studies. He is also the director of the Museum of Jewish Civilization and previously worked in research for the Center for Advanced Holocaust Studies of the United States Holocaust Memorial Museum in Washington, D.C. Dr. Patt has been our historical reference on this project as well as putting the student in touch with the archival footage from the museum.

Learning through critical reflection has been evident throughout this process. As the editing is still in progress, there will be further research for students to reflect upon. The main evidence here will be the final film. We are hoping to keep the project under 40 minutes(Generation Z attention span). Since we are also using archival footage the ratio of footage to final cut is approximately 6:1. This means that the students are consistently reviewing 240 minutes of historical footage in order to complete their 40 minute digital video project. This means that our students are learning six times more then they will be teaching with this project.

Digital Media for Learning

Using film to teach history is not a new concept. Most high schools in the United States have a vast library of historical video learning tools. Historical film media is a solid teaching resource in history classrooms (Donnelly, 2014; Marcus & Stoddard, 2007; Russell, 2012).

Young people, or Generation Z, are totally immersed in digital media representations and find it to be a more comfortable way to learn, as it is what they have grown up using. As Briley and Pultorak would suggest "...a great deal of what students, and perhaps

the general public, "know" about the past comes not from textbooks or teachers but from

... movies" (Briley, 2002 ; Pultorak, 1992). Teachers find that movies tap into youth popular culture and increase student attention and motivation.

Films are able to discuss events of the past that might be difficult for teachers to explain due to the sensitive or horrific nature of these events. Anti-Semitism is one of these areas that teacher have a difficult time explaining (Stoddard, Marcus, & Hicks, 2017).

Digital media that address controversial issues in history, by making connections from the past to the present, are making strong connections with young people.

If you look at the figure below from *Teaching History With Film* (Marcus at al) you will see that, when surveyed, students felt that watching a film helps them to make mental pictures of what the past must have been like. It also helps them to discuss history better then reading in historical text.

	strongly agree (1)	agree (2)	somewhat agree (3)	agree very little (4)	disagree strongly (5)	% who agree or strongly agree	mean
1. I now watch television shows or movies about the past and wonder if the events are true.	4	8	9	6	2	41.4%	2.79
2. I now look for bias in television shows and films.	2	11	3	8	5	44.8%	3.10
3. After I see something on television or film, I will now go and read some information about it to see what other sources of information have to say.	2	1	6	8	12	10.3%	3.93
4. In other classes, teachers use films but do not require students to compare information in the film to other sources of information.	6	13	8	2	0	65.5%	2.21
5. Watching a film helps me to better understand what I read in textbooks and primary sources.	10	14	2	2	1	82.8%	1.97
6. Watching a film helps me to make mental pictures of what the past was like.	14	9	4	2	0	79.3%	1.79
7. Watching a film in class helps me to better participate in class discussions or online forum discussions.	5	12	8	3	1	58.6%	2.41
8. Watching a film, and comparing it to written sources of information helps me to learn about the past.	6	12	8	2	1	62.1%	2.31

In the *State of Video in Education* report by the Huffington Post, 500 educational professionals from across 300 institutions agreed that video has the potential to create a real impact on education. These scholars noted that video can:

- Change the way students learn
- Boost attendance
- Create stronger alumni relations

- Increase the chances for success
- Influence learning outcomes and the overall student experience

Forrester Research estimates that since 90% of the information transmitted to the brain is visual and it is processed much faster than text, and concludes that video can improve learning and increase retention (Tsur 2014).

Until recently, Holocaust education had been neglected in the United States. Now there are many states attempting to mandate that this devastating part of our history as human beings be told. This is why we decided that Finding Matilda should be available to the public schools throughout the state of Connecticut and anywhere else it can be helpful.

Once this project is complete we will begin a campaign to have it placed in both college film festivals as well as made available to the Connecticut high school history departments. We believe that creating a film about the Holocaust from the perspective of a 18 year old girl, will help students to identify and understand this history better.

Future Work

There are two pieces left for this project once the editing is complete.

- 1) We will create a brief questionnaire to go along with the film and ask that the audience complete it both prior to and after the screening. This will give us data on how effective this type of work can be for future historical projects
- 2) We will be paying close attention to the length of the project. There are concerns among the student filmmakers that 40 minutes is too long for this audience. We will create a test screen for both a college audience and high school audience to see reactions. As we are working through the edit, we will be flagging places that could be reduced to create a shorter program.

Conclusion

This project looks to take the college courses in Digital Media, Historical Documentary/Film and look at them from a three-prong approach. Through Experiential Learning the students are able to create a historical story by experiencing the life of someone who lived and ultimately died for it. The audience of peers receives the benefits of this knowledge and also learns history through the life of a peer. Understanding research and editing as the reflection portion of the learning theory gives this area of learning a deeper more critical eye. And finally, the use of Digital Media in teaching and learning as a final step in the proces

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HOW DOES USING FEEDBACK EMPOWER STUDENT METACOGNITION AND LEARNING?

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ABSTRACT

Encouraging students to foster the learning styles and supporting them to strive with the challenges in education are responsibilities of teachers, especially in higher education where students are expected to master their current and lifelong learning. The study, therefore, investigates the impact of teacher feedback on student meta-cognition and explores the link between student achievements and their cognitive skills through a research done on 440 Vietnamese students from 40 universities and colleges in Vietnam. The findings show that only monitoring strongly affect the students' academic achievement meanwhile teacher feedback has no direct impact on the students' results.

Keywords: self-regulated learning (SRL), meta-cognition, teacher feedback, life-long learning, Vietnamese students

1. Introduction

Education has been shifted from traditional teaching (transmitting knowledge from teachers to students) to problem-based learning and project-based learning in which students have to actively participate in accessing to various kinds of information and internalizing it into their own knowledge (Esteve, 2000; Kennedy, 1998). In this case, teachers no longer are providers of knowledge to students but become learning activity organizers and facilitators (Van Driel, Douwe Beijaard, & Verloop, 2001) guiding and giving feedback to students so that students could notice ways to eliminate the gap between the actual learning and the desired goal (Esteve, 2000; Van Driel et al., 2001). To respond to the rapid change in science and technology like what we witness in the second decade of 21st century, self-regulated learning (SRL), “a powerful new learning theory” (Boekaerts, 1996, p.100) shows a vital capacity that each learner needs to construct for himself/herself to study independently or to position in the world with various challenges whilst as teachers,

“The challenge we face is how to make the learning in schools more authentic, more useful, and more contextualized for students so that they are equipped to

solve problems that they confront in and beyond school.” (Winograd, 2003, p.1).

Moreover, the challenges that both teachers and students have to face, exist in the way that how teachers could use their feedback to help students empower their SRL capacity and how students could benefit the teacher feedback to move forwards in the process of mastering cognitive skills. On the other hand, Pintrich and Zusho (2002) defines SRL as a process in which learners set goals for their learning, regulate their learning activities and assess the effectiveness of their work. The writers here just discuss how students’ self-regulated learning in terms of meta-cognition including three elements namely planning, monitoring and reflecting the learning activities, empowers students ability to master their present study as well as help them surpass obstacles in life-long learning.

The present study aims to address the two following questions.

1. How do the students employ self-regulated learning to enhance their academic achievements?
2. How does teacher feedback influence on students’ academic achievements?

2. Literature Review

2.1 Self-regulated learning and metacognition

Many studies had been implemented to uncover the nature of student learning and what could be done to help students become active learners, however, more investigations about student control and their self-mastery needed to be done. Self-regulated learning (SRL) initially appearing in 1980s (Winne, 1996; Butler & Winne, 1995; Winne & Hadwin, 1998), focused on learners’ autonomy and responsibilities for their own goal-directed learning (Winograd, 2003; Paris & Paris, 2001) which refers to the cognitive, metacognitive, behavioral, motivational, and emotional/affective aspects of learning (Panadero, 2017; Sperling, Howard, Miller, & Murphy, 2002). SRL is seen to affect learners comprehensively not only in terms of cognition, regulation of cognition but also of behavior and emotions, hence it has become one of the most leading research in the area of educational psychology (Panadero, 2017).

In the light of the model raised by Winne and Hadwin (1998), Greene and Azevedo’s (2007) in their review of more recent SRL studies have indicated the tasks of students in SRL.

Table 1. Tasks of students in SRL (adapted in Greene and Azevedo's (2007))

1	Identifying the task	A Conditions (of learner and context)
2	Planning a response	B Operations to transform input and own data
3	Enacting a strategy	C Standards: criteria for self-appraisal
4	Adapting: reviewing perhaps re-cycling	D Evaluation

The figure shows different tasks that a self-regulated learner exercise when they try to study on their own. SRL, therefore, brings in powerful skills (Butler & Winne, 1995) which affects learners the most comprehensively in cognitive, behavioral and emotional aspects, in which metacognition refers to cognition and regulation of cognitive strategies (Schraw & Moshman, 1995; Pintrich, Wolters, & Baxter, 2000) meanwhile Veenman, Van Hout-Wolters, & Afflerbach (2006, p.4) defined metacognition in terms of many factors such as “metacognitive beliefs, metacognitive awareness, metacognitive experiences, metacognitive knowledge, feeling of knowing, judgment of learning, theory of mind, metamemory, metacognitive skills, executive skills, higher-order skills, metacomponents, comprehension monitoring, learning strategies, heuristic strategies, and self-regulation”. In their research, Veenman, Van Van Hout-Wolters, & Afflerbach (2006) has specifically conceptualised the metacognitive process which involves all possible steps occurring in mental process that initiate and direct learning. In this case, students act as the central agent of the learning process, which means they actively activate their schemata, employ learning strategies to internalize new knowledge and construct new skills in various learning situations; hence, self-regulated learning encompasses three factors “their use of self-regulated learning strategies, their responsiveness to self-oriented feedback about learning effectiveness, and their interdependent motivational processes” (Zimmerman & Zimmerman, 2016, p.6).

Specifically, self-regulated learning strategies have been classified as “self-evaluation, organization and transformation, goal setting and planning, information seeking, record keeping, self-monitoring, environmental structuring, giving self-consequences, rehearsing and memorizing, seeking social assistance (peers, teacher, or other adults), and reviewing (notes, books, or tests)” (Zimmerman & Zimmerman, 2016, p.7). On the other hand, SRL, a process of self-observation, self-judgement, and self-reactions (Zimmerman, 2014) is compared as a goal-directed activity like other human behaviors. The strategies are the guidelines that learners need to adopt to control and adjust their learning process in a variety of learning contexts in order to obtain the desired learning goals. In short, SRL has become a vital requirement for any learner in generating capacity for their future occupation and lifelong learning (“Self regulated learning in higher education : identifying key component processes,” 2011)

2.2 The theory of formative assessment with feedback in the center and its relationship with SRL

The theory of formative assessment appeared around the time of post structuralism as its philosophical basis (Clark I., 2011), in which formative assessment is conceptualized as a multi-layer trunk with feedback in the central position illustrating the key function of feedback in supporting students to boost their learning in terms of metacognition and self-efficacy.

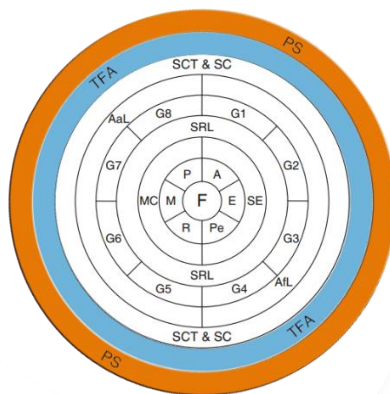


Figure 1. The theory of formative assessment (Clark I., 2011)

The figure 2 (Clark I., 2011) shows the theory of formative assessment (TFA) as the big outer ring serving two purposes of assessment, which is assessment for learning (AaL) and assessment as learning (AaL). Interestingly, the outer ring as the theory of formative assessment (TFA) embraces SRL inside which encompasses self-efficacy (SE) and metacognition (MC), namely monitoring (M), planning (P) and reflection (R) on the left while appearance of self-efficacy (SE) indicates ambition (A), persistence (P) and efforts (E) on the right. The figure implies that formative assessment with the focus of feedback affects SRL cognitively and emotionally.

Assessment feedback has not been defined systematically; however (Evans, 2013, p.71) considers it as “an umbrella concept” that covers various kinds of definitions consisting all “feedback exchanges” that learners got, taken, or received from many sources such as peers, parents, teachers or any person around them. To support students learn better, formative assessment need to be given through the feedback after students perform a task. Formative assessment with the most notable focus on feedback which means “the provision of information about performance” (Yorke, 2014) given to students has been regarded to advance their learning as Eraut (2006) points out:

When students enter higher education . . . the type of feedback they then receive, intentionally or unintentionally, will play an important part in shaping their learning futures. Hence we need to know much more about how their learning, indeed their very sense of professional identity, is shaped by the nature of the feedback they receive. We need more feedback on feedback. (p. 118)

Eraut (2006) has emphasized profound impact of feedback on students’ future progress, however, certain impact of teacher feedback on student metacognition has been underexplored.

According to Winne and Butler (1994, p. 5740), feedback is delineated as, “informative with which a learner can confirm, add to, and overwrite, tune, or restructure information in memory, whether that information is domain knowledge, meta-cognitive knowledge, beliefs about self and tasks, or cognitive tactics and strategies”. Thanks to the feedback, learners know what they need to adjust in their study. More importantly, Butler and Winne (1995) have confirmed the link between feedback and self-regulated learning when stating that feedback brings in the essence of performance outcomes. Boekearts and Corno, furthermore in their discussion of top-down SR draw on the model of Winne and Hadwin (1998) stating that it:

. . .specified the recursively applied forms of metacognitive monitoring and feedback that change information over time (thus influencing goals) as self-regulated learners engage in an assignment. (p. 203)

On the other hand, Nicol and MacFarlane-Dick (2006) argue that teacher feedback is a potential source to strengthen the power of SRL in the way that drive students to become self-regulated learners who are active in problem solving processes (Clark, 2014). Moreover, formative feedback is confirmed as “an iterative and dialogic process that promote reflective thinking and self regulatory strategies among the students” (J.W. Gikandi et al., 2011, p.15)

Metacognition has been classified into categories including knowledge of cognition and regulation of cognition (Veenman et al., 2006). In the same direction, Butler and Winne (1995) have confirmed the link between feedback and self-regulated learning when stating that feedback brings in the essence of performance outcomes and feedback greatly

affect students' all aspects of learning when emphasizing "for all self-regulated activities, feedback is an inherent catalyst" (Butler & Winne, 1995, p.246)

When considering multilateral impacts between teachers and learners and between learners themselves, William and Thompson (2007) analyses the five strategies of formative assessment based on the interrelationship of three dimensions, namely teachers, students and learners in the figure below.

	Where the learner is going	Where the learner is right now	How to get there
Teacher	1. Clarifying learning intentions and criteria for success.	2 Engineering effective classroom discussions and other learning tasks that elicit evidence of student understanding	3. Providing feedback that move learners forward
Peer	Understanding and sharing learning intentions and criteria for success.	4. Activating students as instructional resources for one another	
Learner	Understanding learning intentions and criteria for success.	5. Activating students as the owners of their own learning	

Figure 2. Aspects of formative assessment (William and Thompson, 2007)

Figure 3 shows the interrelationship or the tridimensional direction between the three subjects in education process including teachers, learners and peers, moreover, it reveals five strategies of formative assessment reflecting different types of learning such as collaborative learning (Slavin et al. 2003) and self-regulated learning (Pintrich, 1990) which shows the active role of learners as people taking responsibilities for their learning. The formative assessment from the three sources of feedback helps learners not only notice learning intentions and success criteria but also spot discrepancy between their actual learning state and their desired goal so that they know what they need to adjust and what they need to do to get the desired learning goals. To strengthen the view, Nicol and MacFarlane-Dick (2006) argue that teacher feedback is a potential source to strengthen the power of SRL in the way that drive students to become self-regulated learners who are active in problem solving processes (Clark, 2014). Moreover, formative feedback is confirmed as "an iterative and dialogic process that promote reflective thinking and self regulatory strategies among the students" (J.W. Gikandi et al., 2011, p.15).

3. Research method

A sample of 440 Vietnamese university students (96 males and 344 females) in 40 universities voluntarily participated in the study, which would be demographically described in the table as follows. The survey participants majored in many disciplines of social science and natural science covering five studying levels from freshman to super senior, in which freshmen participated in the survey the majority, followed by juniors, sophomores, seniors while the smallest number of respondents (3.2%) belongs to super seniors.

Table 2. Demographical features of the survey respondents

Category	Group	N	Percentage
Gender	Male	96	21.8
	Female	344	78.2
Classification	Freshman	160	36.4
	Sophomore	87	19.8
	Junior	124	28.2
	Senior	55	12.5
	Super Senior	14	3.2
	Major	Social Science	141
Self-study hours	Natural Science	177	40.2
	Foreign language	122	27.7
	Under 3 hours	160	36.4
	From 3 hours to under 6 hours	88	20.0
	From 6 hours to under 9 hours	90	20.5
Student achievement	More than 9 hours	102	23.3
	Poor	14	3.2
	Average	124	28.2
	Good	223	50.7
	Very good	69	15.7
	Excellent	10	2.3

The students had different ways to spend time studying on their own outside classroom. The majority of them (36.4%) spent the least self-study hours (less than 3 hours) meanwhile the rest of respondents had approximately equal self-study time. Interestingly, the number of students with the longest self-study time (more than 9 hours a week) nearly accounts for one fourths of the total four time groups ranking the second biggest group who focused extensively on their learning outside classroom. The table also reveals the students' academic achievements, of which good students making the majority took half of the total whereas the minorities belonged to the poor and excellent categories and the students of average education level ranked the second group. The students were invited to voluntarily answer a questionnaire including 23 items on students' planning, monitoring and reflection activities.

4. Research Findings

4.1. Student metacognition and teacher feedback

The mean of the three metacognition items (planning, monitoring and reflecting) and the three aspects of feedback fluctuate quite stably from 2.40 to 3.00, which show that most survey respondents agree with the asking items. Among the three metacognitive elements, reflecting or evaluation is the most preferred step of the students in their cognitive process with the biggest mean ($M=2.97$, $SD=.42$) whilst monitoring is the least gratifying step among the respondents and amazingly, all the student agreed with the frequency of the positive teacher feedback they had received.

Table 3. Mean of dimension of metacognition and feedback

	N	Mean	Std. Deviation
Metacognition			
Planning	440	2.74	.45
Monitoring	440	2.40	.49
Reflecting	440	2.97	.42
Feedback			
Feedback Quality	440	2.83	.44
Negative Feedback Frequency	440	2.46	.67
Positive feedback Frequency	440	3.00	.59

4.2. The model of teacher feedback impact on student metacognition and achievement

The model clearly reveals the impact of metacognition on study achievement and the impact of teacher feedback on student metacognition.

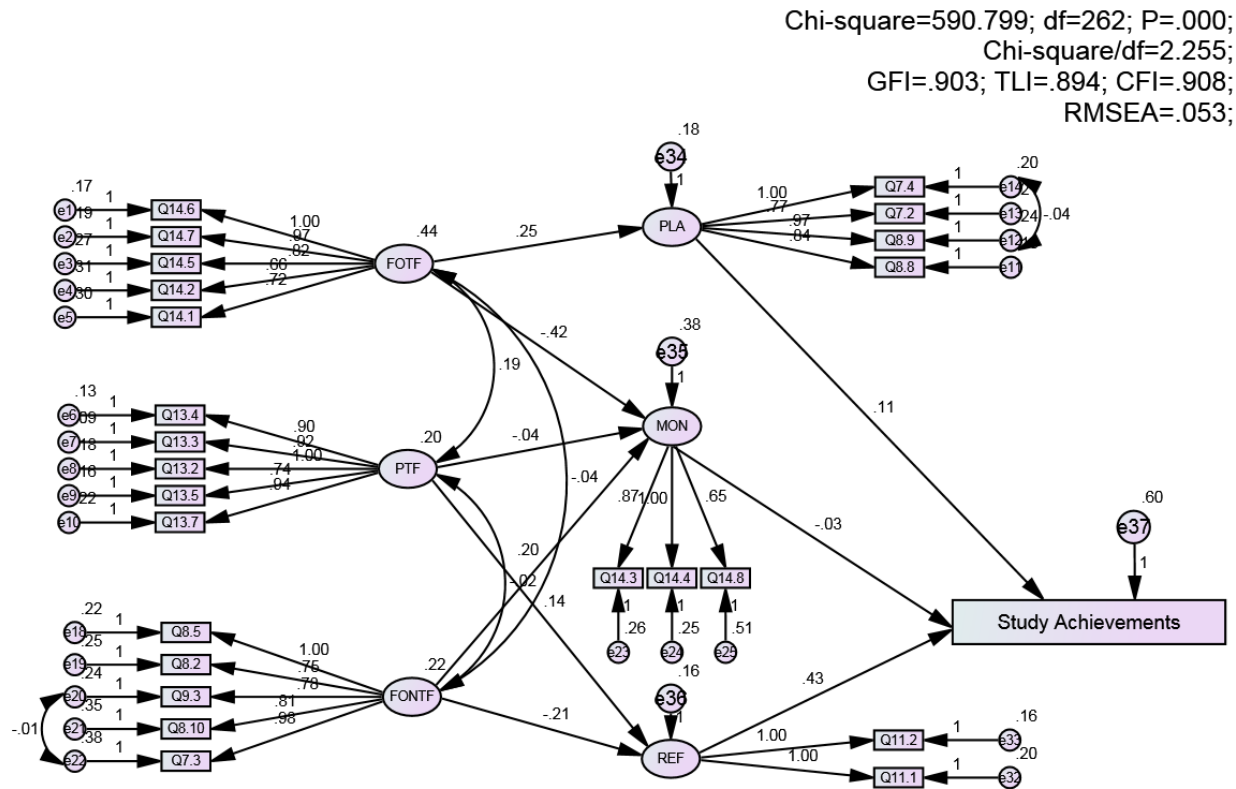


Figure 3. The model of teacher feedback on student metacognition and achievement

The model has the model fit summary as being shown in the table below. The model with $CMIN/DF = 2.255$ (< 3) and $GFI = 0.903$ (> 0.9) indicates that the model is of good quality.

For the purpose of measurement validation, CFA was firstly adopted. In table 2, we showcase the results of our multiple fit indices, including chi-square, degree of freedom, goodness of fit (GFI), adjusted goodness of fit (AGFI), normed fit index (NFI), root mean square error of approximation (RMSEA), and Comparative fit index (CFI). As indicated in Table 2, all multiple fit indices obtained from our estimation are satisfied.

Table 3. Results of multiple fit indices

Index	Result	Acceptable level
Chi-square	395.281	-
Degree of freedom	235	-
Chi-square/ Degree of freedom	1.682	< 5
GFI	0.932	> 0.9
AGFI	0.913	> 0.8
TLI	0.946	> 0.9
RMSEA	0.039	< 0.08
CFI	0.954	> 0.9

The model shows negative correlations between frequency of positive feedback (1) and frequency of negative feedback (5) as well as the negative correlation between frequency of negative feedback and positive feedback (2). Positive feedback and frequency of positive and negative feedback do not in turns affect all three steps of metacognitive skills, conversely, each type affects planning, monitoring and reflecting in its own way with approximately equal force (0.22 – 0.33) except for the influence of frequency of negative feedback on planning which is the weakest. The model also reveals student metacognition in which planning (3), monitoring (6) and reflection/evaluation (9) are negatively interrelated, which indicates that the students flexibly adopted the three cognitive skills instead of rigidly following them in order. It also mean that the students did not evaluate the three skills planning, monitoring and reflection equally important, however they might randomly take any of the cognitive skills whenever they might think it was essential to them. Furthermore, only monitoring has positive impact on student academic achievement meanwhile the other two cognitive skills have no influence on this achievement though the three skills are correlated. This implies that the students did not pay much attention to thoughtful planning and reflection or evaluation on their performance; in other words, their planning and evaluation/reflection on performance were not strong enough to boost any change in study results. It can be understood that the students need to enhance their ways of planning and reflection on performance so that adopting the two steps could result in positive changes in academic results.

The negative feedback and positive feedback have such negative correlation since they are contrastive by nature. On the other hand, the model shows the interrelation between the three metacognitive skills, however, they do not affect one another in the positive way from the first planning skill to the other skills in the cognitive process namely monitoring and reflection. The direction of impact here is negatively converted from the back step (reflection) to the initial monitoring and planning steps in the cognitive stage, which means that the students in the survey did not follow the steps in the cognitive process, they might randomly use any cognitive step which has been in the same line in the research done by Winne & Hadwin (1998, p.281-282). Specifically, positive feedback from teacher help the students determine their clear learning objectives while their clear goals affect student self and peer assessment. Moreover, the more negative feedback the teachers give the students, the more difficulties the students have to deal with since they have little understanding about the teachers' requirements.

It has been found in some surveys that students find feedback the least satisfying factor compared to other elements in their courses (Nicol, Thomson, & Breslin, 2014) so the attention in changing the quality of feedback and the form of feedback should be the focus of our next research.

5. Discussion and Conclusion

Self-regulated learning acts as a source of powerful skills to empower students the capacity to achieve desired academic goals (Winograd, 2003;, Paris & Paris, 2001) and Butler and Winne (1995) evaluates SRL as a pivot upon student achievement, however in this research, we do not see strong influence of planning and reflection on the students' academic achievement. The students in the research, hence need to focus more on their ways of planning and reflection and the teachers also have to spend more time discussing with their students the learning intentions and criteria of success so that they would become better at planning, monitoring and reflecting their learning practice.

Moreover, teacher feedback investigated in the study does not directly affect the students' achievement and feedback has been found to be the least gratifying element (Nicol, Thomson, & Breslin, 2014) while feedback is an essential requirement for students despite their minimum influence on student performance (Kluger & Adler, 1993; Kluger & DeNisi, 1996). The teachers are expected to enhance the quality of feedback and the frequency of positive feedback in order that the learners could benefit from teacher feedback to eliminate the discrepancy between their target learning

goal and their actual state of study.

In our study, the students' monitoring has been proved to be a good indicator that makes a strong positive impact (0.38) on student learning, which needs to be maintained and praised among the students. The findings in the research have urged us to investigate the reasons to explain the very weak or zero link between the students' planning, reflecting and students' academic results as well as study thoroughly kinds of proper feedback that the students expect to get from their teachers.

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CONDUCTING SPECIAL EDUCATION, SPEECH AND OCCUPATIONAL THERAPIES IN ENGLISH FOR CHILDREN WITH AUTISM IN THE PHILIPPINES: RATIONALE, PROBLEMS AND RECOMMENDATIONS

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ABSTRACT

As a former colony of the United States for 50 years, the Philippines has two official languages: Filipino and English. From high school to university, students are mainly taught in English except for certain subjects related to Philippine language, literature and culture, and that includes students who major in Special Education, Speech Therapy and Occupational Therapy. In a country that has English as one of the two official languages, people do not seem to realize the need for translating textbooks to Filipino which is widely spoken in the country, much less to any of over 100 dialects spoken in different provinces. Hence, Special Education teachers and therapists learn their specialization using English, and apply what they know using English. Most Filipinos speak conversational English, and, for certain, neurotypical children grow up knowing some English, being schooled in a bilingual school. However this researcher questions whether the same applies to children with special needs. This researcher would like to explore the rationale for conducting the lessons and therapies in English and its effects on the children with special needs, particularly those with Autism Spectrum Disorder, and recommend actions that may remedy the situation.

Keywords: autism, mother-tongue education, English language, special education, special needs, speech therapy, occupational therapy

Introduction

The idea for this paper was born from a very ordinary incident to which I was a witness while waiting for my son to come out of his Special Education class. Seated next to an elderly Maranao lady [Maranaos are a Muslim tribe in my province, and they have their own language, also called "Maranao," distinct from my own Cebuano and the national language, Filipino], I was speaking with her when the therapist of her grandson came out and spoke to her and explained what they did that session, and how to talk with the child at home, so as to help him practice what he had learned that day at therapy. Having interacted with the grandmother earlier, I knew that her knowledge of Cebuano is limited, and I am almost 100% certain her English is close to zero. In Cebuano, the therapist instructed the grandmother to practice English sentences with the child. The grandmother smiled and nodded, but I could tell she understood little, if anything, of what the therapist told her.

Languages in the Philippines

Majority of Filipinos are either bilingual or multi-lingual. The country has 185 known languages (Philippines, Ethnologue) and/or dialects spoken in different parts of the country composed of over 7000 islands. One reason for this bilingualism/multi-lingualism is the use of Filipino and English as mediums of instruction in schools and universities, neither of which is the first language of 80% of the population (Burton, 2013). To illustrate, a child in my city who grows up in a family of Maranao speakers will obviously acquire Maranao from the other family members and neighbors; his nanny will most likely be a Cebuano speaker to whom the other family members will speak Cebuano as well. When the family watch TV, the language used on TV programs will be either English or Filipino; when the boy goes to school, most of his classmates will speak Cebuano. His cultural community being common in my city, it is highly possible for him to have Maranao classmates like himself, so he will be able to use his first language. In teaching, his teacher may speak Cebuano, English or Filipino. By the time he graduates from university in the same city, he may or may not have fluency in English, but he will definitely be fluent in Maranao and Cebuano and be able to read, write and speak in Filipino as well.

Because the Philippines was under American rule for 50 years, English became one of the two official languages in the country, the other being Filipino. After Americans granted the Philippines independence in 1946, medium of instruction in all levels just until 2012, had always been either English or Tagalog (later Filipino) or both. In 2012 the Department of Education implemented the Mother Tongue-Based-Multilingual Education (MTB-MLE) "in all public schools, specifically in Kindergarten, Grades 1, 2 and 3 as part of the K to 12 Basic Education Program..." (Department of Education, 2012). This requires teachers to use the students' first language (L1) which, to my interpretation, is the home language spoken by the majority of the population in the area/region. In my city, that will be Cebuano.

This order from the Department of Education, however, does not include Special Education (SpEd) programs and Occupational and Speech therapies (OT and ST). The language used in these programs is still English. There are underlying reasons for this, and this paper will explore these reasons and attempt to prove that there is an urgent need to change the current situation to better help children with special needs, particularly those on the Autism Spectrum Disorder who have speech and/or language delays/impairments.

Discussion

A. Autism in the Philippines

Autism in the Philippines was unheard of until the late 80's when what is now known as the Autism Society Philippines (ASP) was organized in 1987. Prior to that every person who behaved differently was perceived as being "abnormal" or "mentally retarded," or having a mental problem and was referred to a psychiatrist. With the increasing awareness of the Autism Spectrum Disorder (ASD) due mostly to parents' advocacy for their children on the spectrum, there is less social stigma and more parents are willing to seek help for their children with special needs.

As of 2018 there is an estimated one million cases of Autism in the Philippines, which doubled from its number in 2008 of 500,000. This excludes the numbers in remote areas where there are no means of diagnosis (Lambatin, 2018). Perhaps the rise can also be attributed to the awareness of the disorder, the availability of diagnosis, and the eagerness of the parents to find ways to help their child.

B. Special Education, Occupational Therapy and Speech Therapy in the Philippines

Special Education in the Philippines has a short history. It began with the establishment of the School for the Deaf and the Blind in 1907 when the country was still under American rule, followed by other schools for those with mostly physical disabilities (Rabara, 2017). Furthermore it was not only until decades later when help for those who have disabilities other than physical became available and only to a small group in the capital, Manila. The Manila Youth Reception Center (MYRC) for "the socially maladjusted and emotionally disturbed" and the St. Joseph of Cupertino School for "the mentally retarded" were both founded in 1962 (Camitan, 2017).

It was only in 1997 when the Department of Education included autism in the list of special needs that Special Education is supposed to address:

*"The Institutionalization [of SpEd Programs in All Schools] aims to provide access to basic education among children with special needs, namely, the gifted/talented, the mentally retarded, the visually impaired, the hearing impaired, the orthopedically handicapped, the learning disabled, the speech defectives, the children with behavior problems, the **autistic children** [emphasis mine] and those with health problems through the formal system and other alternative delivery services in education" (Department of Education, 1997).*

The same Department of Education Order required all school divisions to "organize at least one SPED Center which will cater to children with special needs. Programs organized shall adopt the inclusive education concept or the different types of SPED programs suited to the needs of the learners" (Department of Education, 1997). There is no mention, however, anywhere in this order of the language to be used in this program. As materials are predominantly in English, and training programs for teachers are conducted mainly in English (per the norm in Philippine seminars and training programs for all teachers other than those who teach Filipino), most likely the the SpEd program is also conducted in English. [I can personally attest to this as I have brought my son to a SpEd center more than a couple of times just to keep him busy, and the lessons are conducted in English except for the Filipino subject which is of course taught in Filipino.]

In 1917 the National Society for Promotion of Occupational Therapy (now known as American Occupational Therapy Association (AOTA)) was established in the United States (The American Occupational Therapy Association, Inc., 2019), and by 1945 occupational therapy emerged as a profession in the Philippines, which was then a colony of the United States.

Occupational Therapy is not a popular profession in the Philippines perhaps owing to the fact that, though there is a growing number of people needing this type of therapy, not many can afford to pay for it. In February this year for example, only 211 took the Occupational Therapist Licensure Examination given by the Board of Physical and Occupational Therapy. That is a very small number compared to the more popular Physical Therapy which had 1,287 exam takers (Rappler, 2019).

As reading materials in the Philippine universities, particularly in the field of Science, Technology, Engineering and Mathematics are all in English, it is only logical to have English as the medium of instruction in degrees such as Occupational Therapy. The students who will graduate to become occupational therapists study in English and are trained in English. They will later on apply what they learned as therapists in English. And this is often the case where sessions with a child on the spectrum with speech/language problems are conducted in English even though the child may not have an English-speaking environment at home.

Speech Language Pathology (SLP), better known as speech therapy in the Philippines, was first offered as a degree in the country as early as 1978. However it was not fully recognized as a profession nor properly regulated by the government until as recently as 2017 with the approval of Senate Bill 462 known as "Speech Language Pathology Act of 2016" (Aben, 2017). As of this writing, there has not been a licensure examination for speech language pathologists.

Just like occupational therapy, speech therapy is not a very popular profession either. In fact, only four universities in

the country offer a Bachelor's Degree in Speech Language Pathology (Castillo, 2016) and only in universities in big cities like Manila and Cebu. There is no university in the southern island of the country, Mindanao that offers this course. The fact that there are very few speech therapists and many prospective clients/patients make speech therapy unaffordable. Though parents may want their child to go to speech therapy, the cost is more than they can afford or are willing to pay.

Speech Language Pathology classes in Philippines universities are conducted in English because, again, the materials are all in English. As a parent, I have met with a couple of speech language pathologists and all the materials they showed me, and the instructions they gave are all in English. The vocabulary they asked me and other parents to teach our children is all in English simply because they do not have these materials in our own language.

In summary, special education classes, occupational and speech therapy sessions in the Philippines are mostly conducted in English even though English is not the children's first language, nor is it commonly spoken by parents, primary caregivers or other family members. This is mainly due to the use of English as a medium of instruction in universities where teachers and therapist were educated, and the lack of reading and teaching materials in the mother tongue.

However, the important questions to ask with regard the teaching of children with autism are: (1) Do children with autism, particularly those with speech/language problems need to be taught in a language that is only used in school? (2) If this language, in this case English, is not even used in Kindergarten or early elementary school, what are the children being prepared for being taught in English? And (3) Do they even have the inherent ability, as neurotypical children do, to acquire two or even three languages at the same time?

C. Autism and Language Development

Autism is a complex neurodevelopmental disorder exhibited in delays in and problems with "social interaction, language, and range of emotional, cognitive, motor and sensory abilities" (Greenspan and Wieder, 2006). This definition clearly includes two very important aspects that are central to this paper – language and cognition.

As a neurodevelopmental disorder, autism has to be studied and understood by looking at the brain of an autistic person. In 2014 a brain-tissue study revealed that children affected by autism have a surplus of synapses, or connections between brain cells, and that this excess is caused by "a slowing down in the normal pruning process that occurs during brain development" (Autism Speaks, 2014). In other words, the autistic brain is physiologically different from the neurotypical brain. Not only is the autistic brain structurally different from the neurotypical brain, it also functions differently. This is supported by a study by Dr. Jeff Anderson, a professor in Radiology at the University of Utah Health, where he and his colleagues conducted fMRI scans on both autistic and neurotypical individuals to look at the duration of connections established across brain regions and discovered that in the autistic brains those connections lasted for more extended periods than they did in the brains of neurotypical individuals. Simply put, the autistic brain finds it hard to switch between processes (Cohut, 2018).

Despite the many articles online that claim bilingualism, (or multilingualism in the case of children in my city) may benefit an autistic child, none of them use brain scans as proof of this claim. What abound, however, are studies in neuroscience and language that show the difficulty autistic children have in learning language in general. Williams and Minshew (2010) for instance, argue that "a neurodevelopmental condition like ASD interferes with language development because it interferes with brain development and alters the way the brain responds to environmental input." If learning one language is already difficult for a child with not only speech/language but also cognitive function problems, how is learning or even acquiring two languages that are structurally different such as English and Filipino, or English and Cebuano, for instance, easier for a child with ASD?

In her paper, *The Cognitive Neuroscience of Language Acquisition*, Karin Stromswold (2010) questions the claim of some researchers who concluded from the autopsy of a child with dyslexia that speech language impairment is the result of subtle anomalies in the left perisylvian cortex of the brain. Stromswold argues that the anomalies may be related to the child's "general cognitive impairment rather than to her language impairment" (Stromswold, 2000). The perisylvian region of the brain is responsible for speech and language functions. In the autistic brain, abnormalities in this area particularly the inferior frontal gyrus (IFG, Broca's area), superior temporal sulcus (STS), and Wernicke's area are thought to be related to defects in language and attention processing (Ha et al, 2015). This further proves that an autistic child who suffers from language and cognitive impairments has a brain that is structurally different from that of a neurotypical child, and thus cannot possibly learn language the way a neurotypical child easily learns a language or two.

In her study, Stromswold (2000) further observes that in normal language development, a neurotypical child exposed to language will be able to learn a language like any other neurotypical child, even without being taught, in a relatively uniform way. Furthermore the brain being plastic, a neurotypical will normally acquire language when exposed to it at a period before puberty, and that the period of great neural plasticity is often thought to end at or sometime before puberty. This implies then that for a neurotypical child, exposure to language before puberty is a must if the child is to acquire language. The implication for the child with autism is there has to be more than normal exposure to language and one that will not be too much of a challenge for the child's cognitive ability. Moreover, this exposure to language carries with it an urgency considering there is a time limit for language acquisition to be achievable.

In the Philippines, where the mother tongue (home language) or the regional language is used not only at home but also in Kindergarten and early elementary school for neurotypical children, there is absolutely no need to conduct special education classes, occupational and speech therapies in English for children with autism. Teaching these autistic children in a language the learning of which is limited to the classroom and is not reinforced at home is merely impairing the progress of their already impaired development.

D. Common problems in conducting lessons and therapies in English

Filipinos are proud that they can speak English. Most will readily tell a foreigner that everyone in the country can speak English. There may be some truth in what they say as a Japan Times columnist once noted during a visit to the Philippines that even those who had never left the country were fluent in English, and she credits that to the amount of exposure to English Filipinos get. (Hernandez, 2015). However Hernandez(2015) opines that the previous Bilingual Medium of Instruction policy actually diminished our proficiency in English rather than elevated it.

In the 70's and early 80's, English was the medium of instruction in all levels, programs on TV were mostly American, music on the radio were either American or British, textbooks and novels students read were mostly in English. With the EDSA revolution in the mid-80's rose national pride, and with it the boom of everything Filipino – culture and arts and, of course, language. This benefited the country in terms of unity, but this was one factor that led to the decline of the Filipinos' proficiency in English.

Hernandez (2015) further notes that even the Department of Education admits that previous generations of Filipinos used to enjoy English proficiency as a competitive edge, and that today many high school or even college students cannot express themselves clearly and logically, not only in English but also in Filipino or even in their first language.

The first problem, then, in conducting lessons and therapies in English in this country is the English proficiency of the teachers and therapists themselves. There is no English proficiency examination for teachers and therapists. There is only a licensure exam that includes English, and of course the exam itself is in English. But being able to identify correct or wrong grammar does not necessarily mean fluency. Majority of Filipinos may be able to read in English but the fact is surveys show English proficiency in the Philippines has diminished. One news outlet reported that this problem is supposedly being addressed (ironically) by the US embassy "through a program intended to upgrade the skills of teachers so they can effectively teach English to their students." (GMA, 2018).

This is not to disparage the ability of the teachers and therapists, but from personal observation, teachers and therapists do tend to code-switch between English and the home language in one sentence when they cannot find the right words nor are certain of the grammar in the former.

Is this bilingualism? What language is the autistic child learning from their teachers and therapists?

Many studies in second language acquisition prove that competence in the first language (home language or mother tongue) makes second language acquisition easier (Roberts, 1994). This applies to learning not only language but also content subjects such as math or science.

In fact this is the reason the Department of Education has finally implemented the Mother Tongue-Based-Multilingual Education. They have finally recognized the importance of the use of the mother tongue (home language) in the learning process of the child.

If teachers and therapists are not confident nor competent enough to use English in teaching content courses, it does not

necessarily mean they are not competent to teach at all. They may even be more effective teaching these children with cognitive and language impairments in their first language.

The second problem in conducting lessons and therapies in English is the language proficiency of the children themselves not only in English but even in their own mother tongue. As has been mentioned above, children with autism already have problems with cognitive functions and language. They are already cognitively and linguistically challenged.

Switching from one language (English) that is structurally different from another (Cebuano) and having two different words for the same object (like calling the object “book” in English and “libro” in Cebuano) will only confuse the autistic child. A neurotypical child will, after a few instances, most likely realize that the object can have two names, but for an autistic child whose brain takes a longer time in processing information, this can be a cause for hesitating to name the object at all. This confusion can inhibit the use of language.

The child has not even mastered his first language; he cannot even communicate his needs to his parents in a spoken language, why introduce another language which he will have very little opportunity to use outside the classroom?

In his book *Principles and Practice in Second Language Acquisition*, Stephen Krashen (2009) talks about the limitations of the classroom in second language learning no matter how “natural” the teacher may try to make the discourse to be. It cannot be compared to the learning/acquiring one can get in the “outside world.” In the autistic Filipino child’s “outside world,” English is rarely spoken, except for a few words and sentences directed at him and not at anybody else. This is the third problem in conducting lessons and therapies in English: lack of natural environment for acquiring English.

Whereas it is true that there is more exposure to English in the Philippines than say in China, a child who has ASD cannot really benefit from it unless this massive exposure is directed at him and constantly. With technology, Filipino kids including those with ASD have become adept at using gadgets like iPad and iPhones and with these gadgets they watch videos or play games that are mostly in English. Hence, many Filipino parents think their children with ASD can “speak” English. The fact is, these children are not speaking English they are reciting scripts in English.

Echolalia is repetitive verbal behavior. Many children with ASD repeat the same story over and over again or recite lines from books, commercials or TV programs. According to Greenspan and Wieder (1998), children engage in echolalia because “it’s comfortable; they understand it; they know what’s coming next. They do not have to listen to someone else’s words, which are unpredictable and hard to comprehend. Their language delays and motor planning and sequencing problems make it easier for them to do things that are rote and repetitive.” Hence, in the Philippines setting, the misconception that these Filipino children “speak” English. However, Wetherby and Prizant (2005, as cited in Williams and Minshew, 2010) viewed this as a “sign of holistic storage of information with a failure of analysis and integration.”

To acquire his first language, the child – neurotypical or autistic – has to be exposed to that language. For a neurotypical child, a second language can be introduced without a problem. The same thing cannot be said of an autistic child whose brain is structurally and functionally different.

If the purpose of special education classes is to prepare the autistic child for mainstreaming – and in mainstream kindergarten and grades 1, 2 and 3, the medium of instruction is the mother tongue, it makes no sense why the special education program should still be taught in English.

The same goes for occupational therapy and speech therapy whose main purpose is to help the child acquire skills that he can use in daily living; and in daily life with his family, the language used is not English but the mother tongue. Hence, these sessions ought to be conducted in the child’s mother tongue (home language/first language).

E. Recommendations

1. The Department of Education should include Special Education Programs in the MTB-MLE order. Perhaps it was only an oversight on the part of DepEd, but this should be corrected. It is a fact that majority of the SpEd

students in the government's SpEd centers come from low-income families where English is hardly ever spoken. The autistic child needs as much exposure to comprehensible language, one that he can hear and use whether at school or at home.

2. Private schools or centers that offer Occupational and Speech Therapy should be encouraged to conduct sessions in the child's home language. Consultation with parents should be organized so as to clarify what language is used in teaching the child.
3. The Department of Education should work on having English materials used in Special Education programs translated into the mother tongue.
4. The country needs more special education teachers, occupational therapists and speech pathologists. The government can do more to encourage young people to pursue these professions.
5. The Philippines has over 180 languages/dialects. With a very small number of licensed therapists, it is most likely a number of these therapists know only English, Filipino and their own dialect. In my city, for example, there is no therapist who can speak Maranao. The government can promote occupational therapy and speech therapy as professions where therapists can use their own first language and help their own people.

III. Conclusion

The child with Autism Spectrum Disorder suffers from cognitive and language impairment. He cannot learn a language the same way a neurotypical child can. Despite what well-meaning people say about bilingualism being of benefit to a child with autism, brain scans show that the autistic brain is structurally and functionally different from that of a neurotypical child in such a way that his processing of information is slower. Neuroplasticity diminishes with age, and the autistic brain's slow processing can only handle so much information before it is overwhelmed. Time is of utmost importance, and the child with autism can benefit more from having a first language in which he can be competent.

In the Philippines where there are two official languages, one of which is the first language of a very tiny fraction of the population (English), and the other the first language of less than 40% of the population (Filipino), and where there are problems in conducting special education, occupational therapy and speech therapies in English, children with ASD need to be taught in their home language (mother tongue) to better help them make progress.

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Therese Abonales has an MA in English Language Studies from the Philippines and is currently teaching in Jimei University, Xiamen, China. In 2016 she presented her paper, “Mobile Technology and the Creation of an Artificial English Language Environment outside Chinese Classrooms” at the 4th International LEAP Conference at the University of Malaya in Kuala Lumpur, for which she was awarded Best Paper Presenter. Ms. Abonales’ interest in language and Autism grew out of her desire to help her 8-year-old son who was diagnosed with Autism in 2014.

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ACCREDITATION CHALLENGES AND OPPORTUNITIES IN TEACHING AND LEARNING IN DEVELOPING COUNTRIES

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ABSTRACT

Mexican educational institutions are looking for innovative and creative ways to improve quality standards while implementing different methods and frameworks to assure they are able to compete in the 21st century. However, as higher education is becoming more 'knowledge-based' dependent on promoting mainly 'economic' and 'cultural' growth it seems that quality and diversification in education are sometimes overlooked by policy makers, administrators and professors / teachers in curriculum development, but also in professional practice of teachers. Furthermore, students graduating from high school are not acquiring the applied skills required to fulfill the workforce demands to better serve society. The skills required to enter University relate to English proficiency, reading, writing, math, science and humanities but very little is known or expected about the candidates' skills in creativity, innovation, critical thinking, global competencies, ethics, collaboration, etc.

If at all included, it is mostly addressed for students in the curriculum, but not for educators, which means that it is not aligning the workforce requirements and policies with the cognitive development in this fast-paced digital era where the students, teachers and administrators live and thrive. New Millennial Learners require and possess a different set of values, skills and teaching and learning strategies to cope in jobs that have not yet been created and to solve problems that may not yet exist.

There is an expectation and demand for 21st Century skills in students. However, there is not a clear path to reinforce these as a result of standardized learning outcomes that are not adapted to the new era to compete and be successful in university and in the workforce.

Excellence in education is hard to predict as it varies from context to context, therefore, formal teaching does not necessarily deliver 21st century skills in learners when educators face high levels of pressure, expectations, workload in order to prepare students for the emerging society.

Keywords: 21st Century skills, quality controls, creativity, accreditation, best practices

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