

Team Teaching in the Colleges of Education: Prospects, Challenges and the Way Forward. A Case Study of Gbewaa College of Education, Pusiga

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Abstract: *This study surveyed the opinions of forty (40) tutors of Gbewaa College of Education on the prospects of Team Teaching in the Colleges of Education in Ghana (CoEs). Tutors level of awareness of the prospects; perceptions and frequency of implementation of Team Teaching in their classrooms of Team Teaching were measured by the administration of set questionnaires to the respondents. The challenges and way forward for Team Teaching were also measure through questionnaires. The research design was case study survey via questionnaires. The findings of the study indicate that although tutors are strongly aware of the prospects of Team Teaching, they do not use it. Team Teaching is saddled with challenges including incompatibility of team members, bias in forming teams, unfair comparison of members, and lack of reflective practice in forming teaching philosophies. On the way forward, the findings showed that organising special orientation workshops will boost tutors' confidence on how best to practice Team Teaching. Again, setting aside part of the Staff Development Fund will induce the tutors to practice Team Teaching in their classes.*

Keywords: *Team Teaching, Mentorship, Positive Classroom Culture, Teamwork, Synergy*

1. Introduction

1.1 Background of the Study

The importance of good teaching is no secret. Schools and stakeholders have always tried to search for the best teachers they could get hoping that their students' success depends on quality teachers. There are agitations on the need for teachers to adopt new styles of teaching that will ensure maximum student learning. Moreover, education literatures have increasingly called for collaboration among teachers as a way to enhance the quality of teaching. They argued that such teacher collaboration will facilitate knowledge and skills sharing in order to maximize students' learning. The integration of special education students into the regular classroom has been variously questioned regarding its effectiveness.

It is our considered opinion that teacher collaboration will facilitate the idea of integrating special education students into mainstream classrooms system.

In view of the controversies of teacher collaboration and its efficacies, different studies have been conducted that address different teaching methods for helping students learn effectively. Team Teaching is just one of the methods that have been explored. This is because there are interdependency within subjects (internal connections) and between subjects (external connection) that calls for content integration [1], which calls for collaboration between teachers. There is also the understanding that team learning in mathematics for instance, provides a bridge between the curriculum and the real world and develops interpersonal skills in elementary schools while learning mathematics [2]. This paper discusses the concept of Team Teaching, challenges and the way forward in the Colleges of Education in Ghana.

1.2 Statement of the Problem

The courses in the Colleges of Education (CoEs) in Ghana are such that students are required to learn as many disciplines as possible. Observing the course contents reveal that there is connectedness either inter or intra or both. Examiners reports suggest that tutors skip certain topics which they deem difficult or unfamiliar, thereby creating conceptual gaps among their students. Again, with increased enrolment figures leading to large class sizes, CoEs are under great pressure to improve instruction and increase students' learning. Furthermore, many tutors are overwhelmed by the myriads of tasks in the classroom with which they have to contend with – managing large discussions, assessing students and marking among others.

However, research reports point to one form of teaching, Team Teaching, where a group of coordinated teachers (team) work together in a classroom [3, 4]. They contend that teaching as a team cuts teaching burdens, boosts morale, spreads responsibility, encourages creativity, deepens friendships, and builds community among teachers. The study therefore surveyed the extent to which

teacher educators perceive and use Team Teaching in their classrooms.

1.3 Purpose of the Study

The study sought to find out the perceptions and level of implementations of Team Teaching in classroom as well as their awareness of its prospects in teacher preparation. The study also surveyed practices that teachers considered to be the challenges of Team Teaching and the way forward.

1.4 Research questions

The following research questions guided the study:

1. How often do you come together with other tutors to handle the same topic on a course outline?
2. What is/are the Prospects Team Teaching in Colleges of Education in the 21st century?
3. What are the challenges and the way forward for of Team Teaching?

2. REVIEW OF RELATED LITERATURE

2.1 The concept of Team Teaching

Historically, William M. Alexander, an English professor at the University of Florida first introduced the idea of "Team Teaching" in 1963 [5]. The term was traditionally thought of as when more than one teacher involved in instruction within a classroom. [6] see Team Teaching as a method of coordinated classroom teaching involving a team of teachers working together with a single group of students. It is the collaboration between two or more teacher in "a cooperative endeavour that involves common goals, coordinated effort, and outcomes or products for which the collaborators share responsibility and credit" [6:3]. These teachers may teach the same subject or theme or different subjects.

Depending on the level of collaboration and integration, Team Teaching can be categorized into two. If the collaboration is within the same subject area, it is termed disciplinary Team Teaching. On the other hand, collaborators may come from different subject areas, in such a case; the collaboration is interdisciplinary Team Teaching [6]. On the whole, what we think is common in team taught courses, regardless of the kind of collaboration is teachers mutually come together to co-plan contents, time, and assessment mode, co-teach, observe lessons and share best practices. The prime objective of Team Teaching is to improve professional development of individual members and increase students' achievement.

2.2 Challenges of Team Teaching and the way forward

Collegiality is a basic expectation of all employees and is essential in maintaining or improving the academic quality of an institution. In the opinion of College of Agriculture and Life Science [CALs] [7] collegial relation is the professional criterion relating to the individual's performance of his or her duties within an academic unit that are compatible and consistent with the unit's mission and long-term goals. Lack of collegiality and communication among adults according to [8] would have less positive effect on student understanding and further widen racial gaps.

Additionally, lack of reflective practice among team members [8] is another hindrance of Team Teaching. One of the cardinal pillars of Team Teaching is sharing experiences and best practices [8]. However, this sharing becomes more robust, if individual teachers articulated their teaching philosophies to each other. Personal teaching philosophies are developed through reflective practices [8]. Drawing experience from observations, most teachers at the basic and second cycle institutions in Ghana seem not to have any teaching philosophies, thus our teaching are not anchored on anything. This could partly be due to lack of reflective practice. Research reports indicate that teacher's strength is contingent on his ability to make reflections on his/her teachings. Action research (classroom research) has been instituted to promote reflective practice among teachers to increase teamwork [8]. But to what extent do teachers understand and carry out this?

Team Teaching requires well-trained flexible professionals for effective implementation. Principals should endeavour to encourage and support their staff to upgrade themselves. While the factors accounting for teachers unwillingness to change are still quite elusive, an exploratory study conducted by [10] on "the relationship between teachers' learning styles and their level of resistance to change within a group of schools implementing a large-scale technology intervention", indicate that the level of resistance was higher with untrained teachers. Resistance could also arise due to incompatibility with team members. [8], "the performance of the team depends on the personality and interaction of the team members and on the expertise and experience of each individual." (p. 5) Team Building Home [TBH] [11] likened team incompatibility "to casting actors for a play, where each actor brings a certain quality and dimension and unless the casting is done with care, the director will find the cast incompatible with the script." The same is true in Team Teaching.

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

The research employed a Case Study survey. Case study survey, according to [12] “is a research design in which a survey is administered to a case, either a small sample or an entire population of individuals, to describe an aspect or characteristic of that population.” Since it was designed to source the viewpoints of participants about Team Teaching in only one college, this design fit.

3.2 Sample selection

The population for the study consisted of tutors of Gbewaa College Education in the Upper East Regions of Ghana. All the 40 tutors of the college were selected using convenience sampling technique. This sampling technique was adopted to minimize transportation cost since the researchers lived on the

same campus with the respondents and would not be required to travel anywhere to conduct the research.

3.3 Research instrument

Questionnaire was the main instrument used for data collection. The instrument consisted of two folds. The first part sought information concerning how frequent the respondents used Team Teaching and the other elicited information regarding the prospect of Team Teaching, challenges and the way forward.

3.4 Data Collection Procedure

Data were collected by administering questionnaire to tutors of Gbewaa College of Education to respond. The questionnaires on the prospects and the way forward for Team Teaching can be found in Table 1.

Table 1: Prospects, perceptions, challenges and the way forward for Team Teaching

Questionnaire Items	Strongly agree	Agree	Not sure	disagree	Strongly Disagree
Prospects of Team Teaching					
1. With Team Teaching what one cannot do as an individual can be done as a group (synergy)					
2. Team Teaching does not promote cooperation among the tutors involved					
3. Team Teaching does not lead to positive communication between the adults and children in class					
4. Inexperienced teachers from the team may rely on experienced members to improve their performance (Mentorship)					
5. Students in team taught classes are more comfortable and child-centered as compared to their counterparts in traditional classrooms (Positive Classroom Culture)					
6. Team Teaching provides students the opportunity to observe their tutors working together to teach the same lessons (Students Observed Teamwork)					
7. With Team Teaching, the learning environment can be structured to provide multiple opportunities for children to select and practice ideas and activities independently or in small groups					
The way forward for Team Teaching					
8. In order for Team Teaching to enjoy high patronage, it should be tied to the promotion of tutors in CoE					
9. Special portion of the staff development fund should be set aside to motivate tutors who do Team Teaching in their classes					
10. It is needless to organise special orientation courses to boost tutors' confidence on how best to organise Team Teaching because all tutors are professionally trained					
To what extent do you consider each of these items as a challenge of Team Teaching?					
Challenges	Very little extent	Little extent	Large extent	Very large extent	
11. Team Teaching is time and energy consuming					
12. Unfair comparison from students and other stakeholders					
13. Fear of failure and quick to claim success					
14. Bias in selection of team members					
15. No reflective practice among tutors who are team members					
16. Team members not compatible					

3.5 Data Analysis Procedure

Data were analysed in two folds. It was analyzed to reflect the demands of each of the three research questions posed. Research question one was analyzed using graphed frequency counts. Conversely, research question two was also analyzed using frequency counts of responses and t-test.

4. PRESENTATION AND DISCUSSIONS OF FINDINGS

4.1 How often do you come together with other tutors to handle the same topic on a course outline?

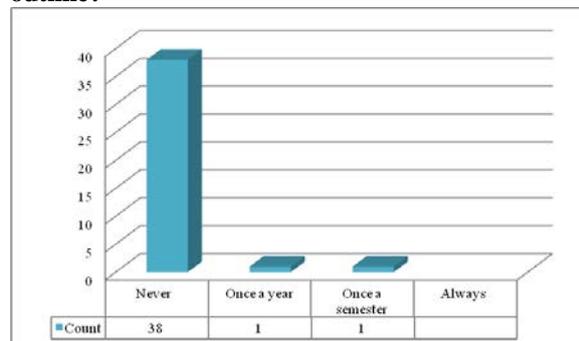


Figure 1: Frequency of using Team Teaching

From Figure 1, 38 (96%) of the respondents indicated that they never used Team Teaching in teaching. Again, 1 (2%) each indicated that they use Team Teaching either once a year or a semester. These results convinced us that almost all tutors in the college do not use Team Teaching despite its remarkable prospects.

4.2 What are the Prospects and the way forward for Team Teaching in Colleges of Education in the 21st century?

To determine the opinions of tutors on the prospects of Team Teaching in CoE in Ghana, questionnaire items 1-7 were summarized and presented in Table 2.

Table 2: Prospects of Team Teaching

Prospects and the way forward for Team Teaching	Questionnaire Items						
	1	2	3	4	5	6	7
Strongly agree	35			40	39	40	39
Agree	5				1		1
Disagree		4	3				
Strongly Disagree		36	37				

Source: Questionnaire administered (see Table 1)

1. With Team Teaching what one cannot do as an individual can be done as a group (synergy)

Frequency counts and percentages were used to analyse the number of respondents on each questionnaire item (see Table 2). A total of strongly agreed 35 (87.50%) and 5 (12.5%) agreed that when Team Teaching is used in teaching, it has synergistic effect. This means that what one cannot do as an individual when teaching, can be done in a group. This is in agreement with [13] that every teacher has strengths and weaknesses and that when a group of teachers work together they are each able to take turns with their strongest personal subjects when teaching thus masking their weaknesses. Additionally, as a result of the complementary roles played in Team Teaching, what neither teacher A nor teacher B cannot do as an individual can be done as a group. Teachers will benefit by being able to meet together and discuss the curriculum and the plan for their students.

2. Team Teaching does not promote cooperation among the tutors involved

In responding to this item, 37 (92.5%) strongly disagreed and 3 (7.5%) disagreed that when Team Teaching is used in teaching it does not promote cooperation among the tutors involved. This therefore means that Team Teaching promotes cooperation among the tutors involved.

3. Team Teaching does not lead to positive communication between the adults and children in class

In analyzing this item, it was noted that as many as 36 (90%) and 4(10%) strongly disagreed and disagreed respectively. This means that the respondents awesomely indicated that when Team Teaching is used, it fosters positive communication between the adults and children in class and should be encouraged. This is in consonance with [8] that students in team taught classes enjoy more comfortable, child-centered and positive classroom atmosphere as compared to their counterparts in traditional classrooms. They observed that the team taught classrooms were warm, much more inviting and incorporated ornately arranged activities for individual and group work. Upbeat communication between pupils and teachers was also noted in team taught classes. Again, research field notes by [8] indicate that “teachers used reminders to cue children into appropriate behavior or actions. Teachers commented on those children who were already engaging in appropriate behaviors and used their praise of these children to entice others to perform the same actions” (p 10).

4. Inexperienced teachers from the team may rely on experienced members to improve their performance (Mentorship)

All the 40 (100%) respondents strongly agreed that Team Teaching helps the beginner teachers to improve upon their performance. In such a case, the inexperienced ones receive mentoring services from the experienced teachers. This corroborates [6] that inexperienced teachers from the team may rely on experienced members from the team, drawing inspirations and constructive feedback in order to enrich their own teaching.

5. Students in team taught classes are more comfortable and child-centered as compared to their counterparts in traditional classrooms (Positive Classroom Culture)

Indeed, 39 (96%) of the respondents strongly confirmed that students in team taught classes are more comfortable and child-centered as compared to their counterparts in traditional classrooms (Positive Classroom Culture). This finding does not run counter to [9] that in Team Teaching the learning environment provides “multiple opportunities for children to select and carry out ideas and activities independently or in small groups”. Students in team taught classes have the potential to apply knowledge, more confidently and freely to share whatever they have learnt. As children learn to share, they reinforce whatever materials being shared, which enhance their memory and subsequently high achievement scores.

6. Team Teaching provides students the opportunity to observe their tutors working together to teach the same lessons (Students Observed Teamwork).

All the 40 (100%) participants strongly agreed to this assertion that Team Teaching provides students the opportunity to observe teamwork.

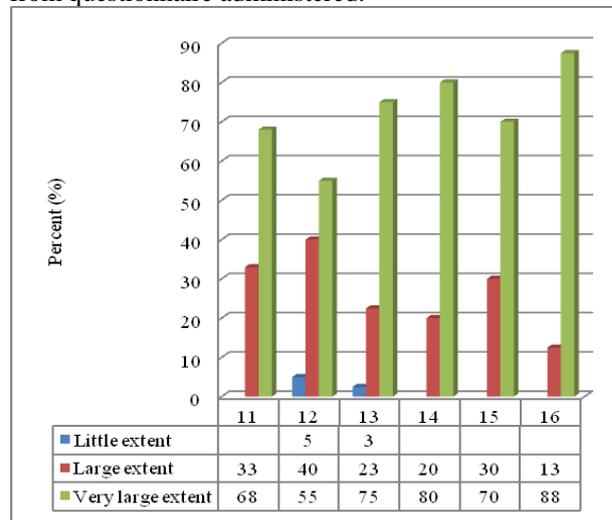
7. With Team Teaching, the learning environment can be structured to provide multiple opportunities for children to select and practice ideas and activities independently or in small groups

There was unanimous allusion with regards to these two questionnaire items as all the 40 (100%) of the respondents indicated that Team Teaching provides students the opportunity to observe their tutors working together to teach the same lessons. Added to that the respondents again confirmed that it helps the students to select and practice ideas and activities independently or in small groups. Based on that observation, students get know that they could also come together to work to achieve a common objective. This is in harmony with College of Agriculture and Life Science [CALs] [7] that team-spirit enkindled by their teachers gives a solid

example of getting along with others in the real world. Students can see adults of different genders, races and backgrounds working together towards a common goal in the mathematics classroom. This enables students to see that science and for that matter Mathematics is universal and exists in every culture or race. Students get to see the superiority of Science/mathematics in different cultures instead of the superiority of different cultures in mathematics.

4.3 What are the challenges

Literature provided by [8] and [4] point to some challenges facing Team Teaching. This research sought to investigate the extent to which these challenges reflected the views of tutors of Gbewaa CoE. Figure 2 present the results the tutors’ opinions from questionnaire administered.



Source: Questionnaire administered (see Table 1)
Figure 2: Challenge of Team Teaching

From figure 2, a large majority of the tutors (88%) view incompatibility of team members to a very large extent as a challenge to Team Teaching. Their opinions underscored TBH [11] who indicated that if the team contain individuals who are ‘too cautious’ thereby fearing to take risks then incompatibility sets in.

The figure 2 again showed that bias in selecting team members to a very large extent was another setback to Team Teaching. This usually happens when managers and/or directors, in this case principals and heads of departments select members not based on strategic thinking competence but on tribal and personal favours. It is instructive to note that team members do not necessarily have to be clones of each other since differences can contribute to creativity as well as growth of the individual members in the team.

The respondents also confirmed that to a very large extent (75%), some team members fear failures and are quick to claim success when success comes

their way. A situation where people fear of failure is very high creativity and innovativeness is sacrificed.

Unfair comparison by both students and other stakeholders also stifles Team Teaching to a very large extent, the respondents confirmed (see Figure 2). Most times people tend to equate Team Teaching with co-teaching, whereas co-teaching two or more involves colleague teachers with similar experiences and training and qualifications, Team Teaching goes beyond this confine. Thus being in the same team does not mean having same experiences, knowledge, qualifications, and training among others. It is therefore noteworthy for people to be aware of the distinction between the two parameters in order to avoid unfair comparison of team members, resulting in unnecessary tension.

While an overwhelming number of the respondents agree that Team Teaching could contribute to the professional development (PD) of members, similar overwhelming numbers confirmed that it is time consuming (see Figure 2). The PD nature of Team Teaching is corroborated by [14] who argued that “Team Teaching makes learning a cooperative and growing process for both students and the teachers.” And that “Hearing two or more perspectives in the classroom likely encourages intellectual stimulation, reinforcement of new concepts,...” (conc. para. 3). It is thus important that as schools seek to promote a culture of intellectual exchange, creativity and innovativeness in teaching and learning, the discomfort of “time consuming” may have to be the ultimate benefit of the many.

On the whole the opinions of the tutors surveyed as indicated in Figure 2 suggest that from large extent to very large extent, a cumulative percentage ninety two (92%) of the respondents view the identified factors (see Figure 2) as obstacles to Team Teaching in the colleges of education.

4.4 The way forward for of Team Teaching?

In order to find out the views of the tutors on the way forward for Team Teaching, the questionnaire items 8-10 were summarized and analysed in Table 3.

Table 3: The way forward for Team Teaching

Responses	Questionnaire Items					
	8	9	10			
Strongly agree	40	38				
Agree		2				
Disagree			1			
Strongly Disagree			39			
Total	40	40	40			

Source: Questionnaire administered (see Table 1)

8. In order for Team Teaching to enjoy high patronage, it should be tied to the promotion of tutors in Colleges of Education

In analyzing this questionnaire item to determine what could be done to ensure high patronage of Team Teaching by tutors, all the 40 (100%) of the respondents overwhelmingly indicated that Team Teaching should be tied to the promotion of tutors in Colleges of Education .This implies that when get to know that through regular use of Team Teaching, could earn them promotion will be motivated to practice it. This disagrees with the assertion of Ogonor [9] that teachers practise Team Teaching to show their level of professionalism. It is rather in accord with [1] that teachers will practise with dedication whatever they know there will be a reward. This is not unrelated to the findings of that Team Teaching in the colleges of education is not motivating for staff since most Heads of institutions in Ghana seem to be unconcerned about their staff well-being. They either do not see the need or do not have interest in their staff well-being. Issues related to their staff promotions, are sometimes impeded for their own personal reasons or not facilitated. The findings go further accuse some school administrators tacitly creating blocs among staff just to satisfy their personal interest. Teachers who feel they are not in the good books of the school head become embittered and dispirited. As a result, they do not see the need to implement worthwhile strategies such as Team Teaching. Such teachers are thus not committed to avail themselves to the huge time require to implement effective Team Teaching. Furthermore, they feel reluctant to contribute or share best practices with others let alone collaborate with them to teach.

Ironically, [8] noted that while good schools heads are often led by people who are instructional leaders, most of them tend to be managerial in nature, related more to budgeting, scheduling, and complying with regulations rather than improving instruction or creating enabling environment that support student’s learning.

9. Special portion of the Staff Development Fund should be set aside to motivate tutors who do Team Teaching in their classes

Once again, all the 40 (100%) respondents either strongly agreed or agreed that portion of the Staff Development Fund should be set aside to motivate tutors who do Team Teaching in their classes. It will serve as an incentive that will boost their morale to become regular practioners of Team Teaching as this is not unconnected to the claim by [1] that teachers will practise with dedication whatever they know there will a reward.

10. It is needless to organise special orientation courses to boost tutors’ confidence on how best to

organise Team Teaching because all tutors are professionally trained

It is interesting to note that all the 40 (100%) respondents over convincingly either strongly disagreed or disagreed with the statement that it is not needless to organise special orientation courses to boost tutors' confidence on how best to organise Team Teaching because all tutors are professionally trained. This could be attributed to the fact that the tutors are quite aware that even though they are all professionally trained, nonetheless organizing orientation courses will boost their confidence level or revitalized their skills. The importance of in-service training cannot be over scored as pointed out by [13] that staff professional development is often relegated to the background even though ample evidence points out that students' achievement are positively correlated to teacher's knowledge. However, [15] further exonerates [13] by noting that continuous staff professional development should be pivotal in principal's action plans.

4.4 Findings

- ❖ Even though, tutors are overpoweringly aware of the prospects of Team Teaching, they do not use it.
- ❖ When Team Teaching is tied to the promotion of tutors in Colleges of Education it will motivate the tutors to practice it
- ❖ When part of Staff Development Fund is set aside for Team Teaching it will induce the tutors practice Team Teaching in their classes.
- ❖ Organising special orientation courses on Team Teaching will boost tutors' confidence on how best to practice Team Teaching
- ❖ In a team based classroom, students benefit from the various backgrounds and expertise of each teacher.
- ❖ Team Teaching is faced with a number of challenges stifling its implementation. Some of the major one being incompatibility of team members, time consuming, bias in forming teams, unfair comparison of members, and lack of reflective practice in forming teaching philosophies and so on.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Given the importance of Team Teaching, its implementation in the colleges of education is faced with myriad of problems. Some of these include: time constraints, bias in selection of team member, unfavourable comparisons, incompatibility with team members, lack of reflective practice, clash of ideologies and lack of bonding with students. The

rest are who takes credit/blame for team success or failure? and ultimately whose responsibility?

As long as the expectations for students' achievement continuous to be high in Ghana, teachers would have to put into practice novel and effective teaching approaches that will meet these expectations. As such Team Teaching is one of those noteworthy methods that teachers need to adopt, especially in the colleges of education, since they are responsible for the turnover of teachers for the basic level in Ghana.

Given the logical conclusions, the onus rests on the principals and heads of departments as directors of the movies (institutions) to rise above person biases, askew divisive tendencies and be seekers of both administrative and academics 'on' (success). For the two are bed fellows. They should also ensure that their staff welfare is catered for without compromise. Collegial relationship should be encouraged. When these conditions are catered for, it is natural that teachers, as professionals should be prepared to collaborate with colleges for effective implementation of important issues such Team Teaching among others that concerns their students' learning and their own professional developments without recourse to rancor.

5.2 Recommendations

It is important that school heads rise above ethnic and tribal lines to forge good relationship among their staff. One way to ensure staff effective collaboration is to rationalize how positions are distributed among staff. Principals should note that they are working with adults who are quick to sense suspicion should they engage in divide and rule type of administration.

Principals as directors can ensure careful selection of team members by ensuring that only those with expertise are selected- devoid of personal bias- so that square pegs are not put in round holes.

Too often, team members become too obsessed with the desire to claim responsibility for success of the team, but dissociates from it for failure. This is not worthwhile for team-spirit. Members should be made to understand that both success and failure are theirs (we either sail or sink). In this way the collaboration is likely to strengthen. Administrators should avoid passing derogatory remarks and making unfavourable comparisons. This is because situations do vary from individual to individual (individual differences) in the same group.

Then again Team Teaching should be made part of the ongoing T-TEL (Transforming Teacher Education and Learning) PD sessions. This would serve to sensitize tutors on the prospects in teacher training. It would also serve to educate them (tutors) on the distinction between Team Teaching and its near-analogous terms like co-teaching, collaborative

teaching among others in order to avoid unfair comparison of term members.

REFERENCES

- [1] Davis, J. R. (1997). *Interdisciplinary Courses and Team Teaching*. Phoenix: American Council on Education/Oryx Press Series on Higher Education.
- [2] Deubel, P. (2010, May). "Harnessing the Power of Educational Technology for the Standards Movement". *Computing Technology for Math Excellence*. <http://www.ct4me.net/>.
- [3] Liu, L. (2008). *Co-teaching between native and non-native English teachers: An exploration of co-teaching models and strategies in the Chinese primary school context*. Retrieved from <http://www.nus.edu.sg/celc/publications/RELT72/103to118liu.pdf>
- [4] Jang, S. (2006). "Research on the effects of team teaching upon two secondary school teachers. *Educational Research*, 48(2), 177-194."
- [5] Pace, E. (1996, August 29). "William M. Alexander, 84, dies; fostered idea of middle schools". *New York Times.com*. <http://www.nytimes.com/1996/08/29/us/william-m-alexander-84-dies-fostered-idea-of-middle-schools.html>.
- [6] Steward, T., & Perry, B. (2005, September). "Interdisciplinary Team Teaching as a Model for Teacher Development". *Teaching English as a second or foreign language, TESL-EJ. Vol. 9, No. 2. pp 1-17*. Cambridge: Cambridge University Press.
- [7] CALS (2008, Fall). *The Importance of Collegiality to the Quality of the Workplace Environment College of Agriculture and Life Sciences*. Arizona: CALS.
- [8] Bronson, C. E., & Dentith, A. M. (2005, Nov. 11). "Facilitating Effective Collaborative Team Teaching: What Instructional Leaders Need to Know". In *Democracy in Educational Leadership: The unfinished journey towards justice. Conference proceedings convention 2005*. David C. Thompson & Faith E. Crampton (Eds.). Nashville, NT: UCEA.
- [9] Ogonor, B. O., & Badmus, M. M. (2006, November). "Reflective teaching practice among student Teachers: the case in a tertiary institution in Nigeria". *Australian Journal of Teacher Education. Vol 31, No 2*. Nigeria: University of Benin. <http://ag.arizona.edu/extension//profdev/CALSCoLlegialityDefinition.pdf>
- [10] Oreg, S. (2003). "Resistance to change: Developing an individual differences measure". *Journal of Applied Psychology*, 88(4), 680-693.
- [11] TBH (2009). *Team Incompatibility*. <http://www.teambuildingportal.com/articles/team-failure/casting-wrong-team>.
- [12] Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research* Thousand Oaks, CA: SAGE Publications Ltd. doi: 10.4135/9781412957397
- [13] Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work*. San Francisco: Jossey-Bass.
- [14] Rottier, J. (2001). "Team Teaching". Retrieved February 24, 2017, from http://www.pps.net/cms/lib8/OR01913224/Centri-city/Domain/4154/team_teaching.doc
- [15] Hill, H. C., Rowan, B., & Ball, D. L. (2004, April). *Effects of Teachers' mathematical knowledge on student achievement*. San Diego, CA: American Educational Research Association.