Communication Across the Curriculum: Teacher's Perception and Implementation Model

[1]Anubha Ray, [2]Prajna Pani

[1]Birla School of Management, Birla Global University, Gothapatna, Bhubaneswar, Odisha
[2]Centurion University of Technology and Mangement, R Sitapur, Gajapati, Odisha, India

Email: [1]anubha.ray@bgu.ac.in, [2]drprajnapani@gmail.com

ABSTRACT

Communication skills are consistently identified as one of the top graduate skills that university students are expected to possess. There is a growing consensus among the researchers and educators that the development of these skills can take place most effectively in the context of the disciplinary study and should be embedded into the entire curriculum(Arkoudis & Starfield, 2007).Although Communication Across the Curriculum or CAC has become one more way to reform pedagogy, research findings emerging from this initiative find difficulty in its implementation. There are also programmatic challenges which require a deeper understanding of the unique interdisciplinary issues involved with teaching and learning of communication across the discipline.

For this study, an MBA Programme of a leading private university in Odisha was taken as a case study.This paperseeks to explore the discipline(subject)teacher's perceptions about CAC. Through a qualitative research method of one to one interview, questionnaire and observation, it is suggested that CAC may be implemented if not explicitly but implicitly in some subjects and an implementation framework was suggested taking the teacher's ideas and concerns into consideration.

1. Introduction

Research studies have emphasized that unless students get opportunities to speak and write regularly, they cannothave a stronger handle on the subjects being taught nor can they improve their communication skills. Communication skills here essentially mean the ability to speak and write in English which isone of the necessary graduate attributesalong witha range of other important

skills like problem-solving skills, IT skills, creative and critical thinking and also the attitude to work in a team. Numerous studies have established that the development and demonstration of these above skills depend on sound communication skills (Barrett-Lennard, Chalmers &Longnecker, 2011; Finley & Rhodes, 2013). The challenge is that although communication skills implicate in all academic work their development is assumed to have taken place and in universities, communication class is treated as extra-curricular activities (Jacobs, 2007). In anera of globalisation,the development of communication skillsisone of the core priorities and have been explicitly included into the changedcurriculum (Blackmore &Kandiko, 2012, UWA, 2009; King's Warwick Project, 2010). In addition to the subject or discipline-specific knowledge, universities are now keeping communication skills as the 'essential learning outcomes'(Oliver, 2015).

Embedding Communication skills explicitly in other disciplines is considered a 'wicked problem'because of the difficulty in implementation, collaboration, assessment and pedagogical issues. CAC is a university initiative or programme where communication instruction is implemented in other disciplines and thereby changes the 'teaching practices, instructional resources and student learning abilities(Dannels and Gaffney, 2009). With the changing curriculum, the development of communication skills has been explicitly integrated into the entire curriculum(Blackmore &Kandiko, 2012).Speaking and writing activities are incorporated as compulsory components in all disciplines and are nomore considered just an 'add-on exercises'. In many Australian universities, the move is much deeper and more rigorous with the growing recognition that communication skills need to be taught and learned within the discipline context with a collaborative approach. The researchers in English language development have been advocating language development across the curriculum design and assessment and have been emphasizing on the contextualization of communication within the discipline(AUQA, 2012). According to Arcoudis (2014), CAC principle includes thepromotion of communication skills as a core competency and to be discipline-specific which will also help the students to be ready for disciplinary learning and to be able to write and present the understanding of their subjects through effective communication skills. As speaking and writing activities take place in a sequence, students need to be given multiple opportunities to speak and write across the curriculum.

The paper raises the following research questions:
RQ1: What are the benefits and challenges in embedding communication in the other subject classes i.e. across the curriculum?
RQ2: What are the concerns and perceptions of discipline teachers on CAC?
RQ3: Is it possible to create a framework/implementation model keeping the above objectives in mind?

Objectives of the study are:
- To investigate and analysethe discipline teacher's perceptions on Communication Across the Curriculum
- To suggest an implementation plan for Speaking in the Disciplinary Context

1.1 Background of the Study

For this study, an MBA programme of a leading private university in Odisha, India has been taken as a case study. In a batch of hundred and ten students, more than 50% of students are from the same state and the batch is in their first trimester. They are observed to be speaking mostly in their mother tongue, i.e.Odia and Hindi is a default language of all. Majority of themlack adequate proficiency in speaking and writing in English which is a matter of grave concern for boththe teachers and the Management because communication skills are the key skills that the employers look for and the lack of it is seriously affecting their employment opportunities. The MBA programme hasa continuous evaluation system with 50% marks for the internal evaluation. Each course has presentation, writing assignments,case study, quiz, and live projectseither ascompulsory evaluation componentsor part of the classroom activities. The students study subjects in Marketing, OB and HR, Finance, Operations, Statistics, IT, Economics besides two papers on Business Communication in the first year of MBA.The course content of the Business Communication paper has a good mix of theory and practice in speaking and writing. The two papers in Trimester 1and II emphasised on the proficiency development of the students in speaking and writing. The students also attend Language Laboratory sessions to complement the theory classes and practice listening and reading sessions.To ascertain the students' level of proficiency in English, the teacher conducts a diagnostic test on their speaking and writing abilities as per the Common European Framework of References (CEFR) framework.

Out of all the subjects in the first year, Marketing, OrganisationalBehaviour, Economics and Finance have communication-based activities likegroup presentation, live projects, case study discussion besides other activities. The teachers have designed their session plans with the outcome-based learning (OBE)format in which the course outcome and programme outcomes can be mapped.In short, inOBE format, the effectiveness of one's teaching can be ascertained and the teachers canhave the autonomy to reform pedagogy and assessment as they "legitimately enjoy the right to administer tests for assessing the learners' capability in the attainment of the outcome"(Gurukkal 2020).In the MBA Programme outcome of the said university, the mention of 'communication skills' twice and 'employability' once is a clear evidence of its goals, one of which is to improve students' communication skills. In this scenario, it is imperative to investigate the subject teachers' perceptions and concerns on cross-curricular method of teaching and CAC because this new method can be effective if the teachers are open to the idea and ready to change

their instructional practices and collaborate with CAC coordinators with the aim get to the desired goal of improving communication skills of the students.

2. Literature Review

2.1 Communication Across Curriculum: Theory and Practice

In 1974, a programme termed as SAC (Speaking Across Curriculum) was initiated at Centre College, Iowa (Tomilson, 1994) and since then CAC has gone through several modifications and transformations but CAC has remained an umbrella term for many activities.Subsequently, the movement took various nomenclatures like Speaking and Listening in the Disciplines SALAD (Weiss, 1988), Communication Across Curriculum (Daniels, 2001; Darling and Dannels, 2003) through its transformative journey across universities and various exponents. CAC as a full fledged programmes started after 1990(Hay, 1987; Oslen 1996)in the universities of Australia and America with greater effectiveness and planning. As Hay rightly points out, before 1990, very few universities had implemented university-wide CAC programme because of the implementation problems and other issues like willingness to collaborate on the part of the subject teachers. In spite of all the efforts, there were numerous difficulties in the implementation of CAC including some serious concerns of the subject teachers which resulted in creating a sustainable, feasible and goal-specific frameworks for bringingcommunication skills into a common platform in the chosen disciplinary study (Arcoudis and Starfield, 2007).

The CAC movement gained momentum towards the end of the 20th century with the adoption of the programmes in some of the renowned American Universities like MIT as part of their educational reform. MIT has a long history of CAC and WAC which were initiated as pilot projects. The university realised the need for the students' practice in communication to be able to effectively communicate as successful engineers and entrepreneurs in future. As Perlman in MIT newsletter writes: 'Writing Across the Curriculum (WAC) assists faculty in incorporating instruction and practice in writing, speaking, and visual communication throughout the undergraduate curriculum'(Perelman 2009). Although the title is "Writing Across the Curriculum", the WAC group in MIT teaches various forms of communication, including oral and digital communication.

The cross-curricular approach has been a topic of debate for long with some teachers accepting it and some rejecting it. There were a few studies which addressed the teachers' concerns and thoughts on integrated teaching.Knight (1993) stated that: 'A major problem with integrationis simply that it demands sharp subject-matter understanding'. Thus, there is a body of literature to suggest that a teacher's knowledge and understanding on the other subject is directly related to the quality of the students' learning in a cross-curricular structure(Ryan and Jones 1998) and that an integrated approach demands of teachers high levels of skill and a wide 'pedagogical repertoire' (Burgess 2004; Wood 2011). Teachers in favour considered itas a better reflection of the students' real learning experience(Tann 1988; Pamer and Pettitt 1993; Laurie 2011). One more argument in favour of this approach is that students are more

motivated to learn when the curriculum is organised in a cross-curricular way (Darling 1994). In a cross curricular learning, theory and practice can be developed together across 'different contexts' with a flexible approach the structuring the curriculum(Greenwood 2013). CCEA (2006) used a phrase 'connected learning' in the context of the proposed revision of the curriculum and defined it as:'….connecting new learning to learners' priorexperience; making explicit meaningful relationships between knowledge and skills in different contexts; and encouraging the transfer ofknowledge and skills across different contexts. (CCEA 2006)

Arcoudis (2014) advocates few principles like promotion of communication skill as a core competency, support towards the implementation of WSR (writing, reading and speaking) and discipline-specific support to enhance the effective integration of the skills into curricula. In the school level, language across the curriculum as a cross-curricular approach has been implemented and researched as language plays a central role in learning and students assimilate subject concepts largely through language. Language is linked to the thinking process which they express through speaking and writing. Therefore, when students explain any new learning of their subject, not only their subject knowledge gets improved but they understand the use of language in the specific context. Hayes (2010) supports the approach and highlights the fusion of concepts across subjects as a major booster towards creating a broader perspective in a student.Communication skills are implied in all academic work but the development of these skills is tacitly assumed (Jacob 2007).Despite the above benefits, the explicit embedding of the teaching and assessment of communication skills is still seen as a 'wicked problem'(Hayes, 2010).

Despite the challenges, teachers and researchers have realized the benefits of CAC and have developed roadmaps to improve the communication skills of the students. One such model developed by Murdoch in which communication skills are embedded not explicitly but implicitly. These skills are summarizing, reading critically, interpersonal skills, and integrating diverse and discipline-specific perspectives in written and oral forms. Murdoch's new curriculum offered an opportunity to redesign and implement Communication Skills Framework across the curriculum.
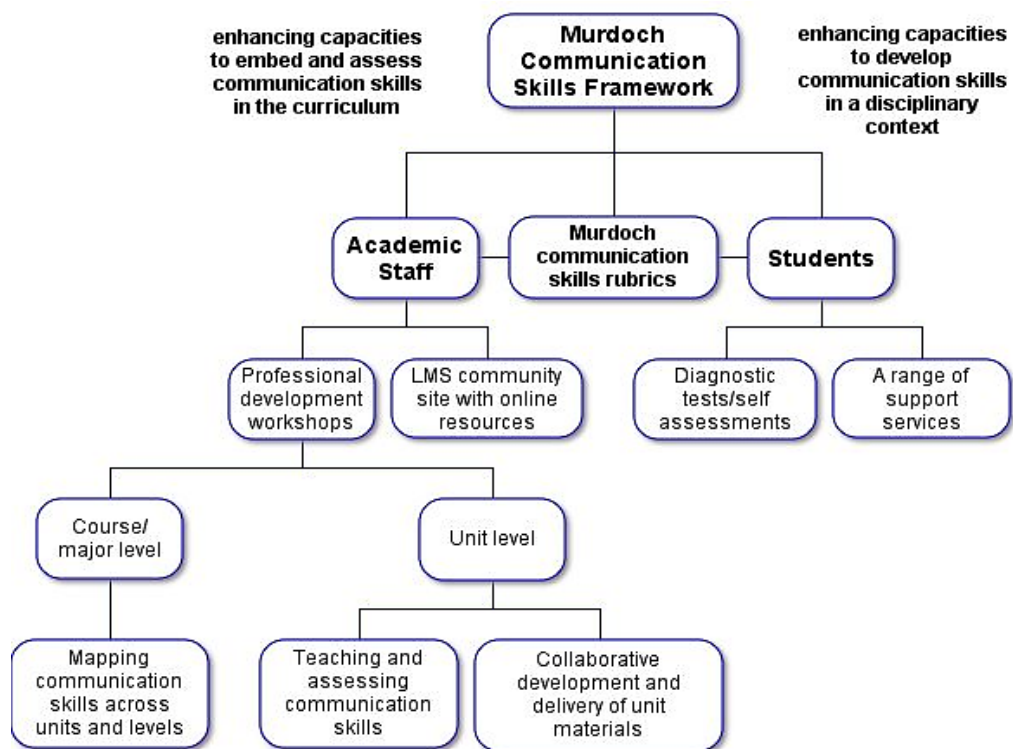
Murdoch's Model

Figure 1: Murdoch Communication Skills Framework
(Source:https://files.eric.ed.gov/fulltext/EJ1063842.pdf)

2.2 Challenges of CAC

Teachers have been divided on their thoughts on cross-curricular approach with strong arguments against thisapproach. They complain about their weak knowledge on the integrated subject and that this approach demands the teacher's high level of skills and 'pedagogical repertoire'(Burgess 2004; Wood 2011). Teachers find it practically difficult and not an efficient way for the students to learn as it is termed as a 'poor instrument' for acquiring knowledge and skills in a disciplined way (Morrison 1986; Kerry and Eggleston 1988; McNamara 1994). For many teachers, the main arguments are about the possible loss of distinctiveness of a subject and assessment being anotherproblem(Knight 1993; Coe 2010; Johnston 2011).The adoption of CAC programme into regular course structure has been problematic. The issues need intervention from multiple perspectives for their interdependent feature (Kraus, 2012 & Knight 2007). Lack of adequate training and readiness on the part of teachers is a major concern in this aspect. The challenges such as of linking it effectively with the course goals, engaging disciplinary discourses, lack of expertise on the part of the subject teacher, collaboration, their willingness to participate, accommodating the needs of subject teachers and other hidden challenges or issuesremain in such an endeavour (Johnson, Veitch, Dewiyanti 2015).Therefore, first, the need for a CAC programme has to be established and communicated to the Administration keeping in mind the university's goals and develop strategies for CAC, as suggested by Jackie L. Jankovich and

Powell from Colorado State University, the Coordinators of the CAC programme of the university. But whatever the difficulties might arise, it is ultimately the discipline/subject teachers who play a critical role will to make CAC effective. Therefore, it is imperative to know their concerns.For many teachers, the main arguments and the practical difficulties associated with the implementation of an integrated curriculum have centred around the issues such as:

- Fear of loss of distinct identity on the part of primary subjects
- Production of low quality work
- Weak planning of the programme because of poor coordination between subjects
- Slow course coverage
- The setting of assessment criteria- a challenge (Knight and Coe 2010)

3. Methodology

Study design and Instrument, Study Setting, Sampling, Respondents' Profile, Data Collection and Analysis are described below:

For this study, a qualitative methodology was adopted to investigate and explore the perception and attitude of the subject teachers(respondents) of an MBA Programme towards CAC. A wide range of ideas and opinions about the various issues related to CAC were collected from the individual teachers. The cumulative process of validation was selected over argumentative process depending on the nature and availability of resources. Reliability was ascertained by preserving the recordings of the face to face interview of the respondents. First, it was piloted on two PhD students of the university who are engaged in assisting the subject teachers in their class at times. An in-depth one to one interview was conducted with all the eleven subject teachers including the teacher on Business Communication taking the prior appointment with individual teachers. Besides the interview, questionnaire and content analysis were used as data collection instruments. Each interview lasted for about 30 to 40 minutes and some probing questions were also asked to get the free expression of their ideas and comments.

The study was conducted in one of the leading private universities in Bhubaneswar, the capital city of Odisha, India. The MBA programme is not only the flagship programme of the university; it also has the highest number of students than other schools. In the batch of 2019-21, there were a hundred ten students. More than forty percent of the students are from the state of Odisha, speaking mostly in Odia language. The study sample consists of eleven teachers who are engaged in the first year of the MBA programmefor the academic year 2019-20. A questionnaire was used to know their basic information, the subjects they deal with and other characteristics like gender, education and experience. It consisted of twenty-two questions to identify the respondents' ideas about CAC and the implementation possibilities and barriers. Out of eleven teachers, eight teachers are male and three are female. Their age ranges from 35-50 years. Ten out of eleven teachers have Ph.D as their highest qualification. One teacher has twenty years of industry experience

and without a Ph.D degree. All the teachers have been teaching in B-schools, teaching Management papers having five to fifteen years of teaching experience.

During the analysis, five major aspects were identified: 1. The respondents' ideas about the communication skills development process and CAC, 2. Pedagogical reform and the required training for CAC, 3. The cross-curricular approach of teaching and collaboration, 4. Barriers for CAC and 5. Teacher Autonomy. The responses to the respondents' beliefs and perception on the communication development process, the factors responsible for the growth of communication, their ideas on discipline-specific communication, on cross-curricular approach, on CAC programme, individual instructional approaches, pedagogical reform, autonomy in the design of course and pedagogy were carefully reviewed and analysed.

Therespondent who teaches Business Communication shared her concern regarding the students' lack of proficiency in English. She also shared the result of a diagnostic test on the students' level of proficiency in English which was conducted in association with Cambridge, discussed. A brief description of the students' ability in each level is described below:

A1 & A2 are students who do not have proficiency either in writing or speaking. They cannot sustain even a minute or two minutes speech on any topic drawn from their real surrounding. They make many grammatical mistakes and have the least stock of vocabulary. They use a lot of fillers while speaking. They lack in 3 Cs - Concept, Communication and Confidence. This group is a treatment group which requires special attention and remedial classes.

B1 & B2 students are partially fluent and are slightly underperformers. They have production of less vocabulary, can use functional level language. They commit grammar/syntax level error sometimes. They have moderate to less interactive skills. They may have content but they may fail to express themselves freely.

C1 & above students are fluent and articulate in speaking and writing. They have good command on their interactive skills, can understand and answer with appropriate responses. They show moderate to high production of vocabulary. Their pronunciation is neutral and can use correct inflection. Some of them are even creative in their language use although at times may have grammar/syntax level inaccuracy. They are students with high self-esteem and meet the expectation of teachers.

The result of the test shows more than thirty-five per cent of students are below the B2 level that is the minimum expected proficiency level at the MBA level. In a batch of hundred and eleven students, only thirty-nine students come under B2 and C1 level. Therefore, there is an acute need to integrate communication in the other disciplines so that students get sufficient opportunity to communicate in the discipline-specific context.
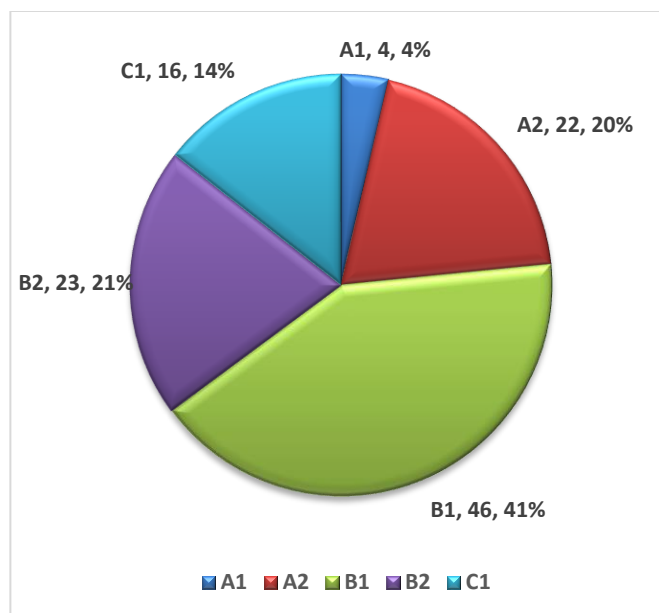
Figure 2: The result of the proficiency test on speaking & writing in English

The respondent emphasised that the students' communication skills can get better with practice in multiple contexts and believes strongly about the repetition of the activities across the curriculum for the reinforcement and expansion of the skills taught in Business Communication class. In a three-credit Business Communication paper and thirty-hour sessions,every student in a section having nearly sixty students,gets about five to seven minutes of speaking activities, either in the form of presentation, group discussion and writing assignments. The teacher gives feedback on individual student's speaking skillsbased on the rubrics on content, organisationof the content with logic and clarity, delivery and appropriate use of vocabulary, pace, volume etc. Ten more discipline teachers were also interviewed one to one.Here, the subject teacher and discipline teacher are used as synonyms. All the discipline teachers take thirtyto forty-hour sessions in that trimester. Except for three respondents who teach Statistics, IT and Accounting, seven teachers conduct presentations and give written assignments as part of the internal continuous evaluation which has fifty percent weightage. Forty percent of the teachers said communication skills are not kept as an evaluation parameter for the students' presentation evaluation but all the respondents admitted to having awarded more marks to those students who showed articulation and are more fluentduring the presentation. They admitted not to have much of idea about the rubrics of evaluation for the speaking skills. The students are awarded based on their presentation content and the process they have undergone to reach the content. Ten written assignments and ten mid-term answer scripts of the students were picked up randomly with the permission of the respondents and analysed. Varieties of language errors on spelling, grammatical or even sentence-level errors werefound confirming to the level of language proficiency of the students but the errors werenot highlighted nor discussed

with the students except in the Business Communication paper.The course content and the learning outcomes of all the courses were analysed to find if there is any explicit or implicit linking with communication skills in their course

All the teachers responded that it is not possible to conduct more than one presentation in a thirty-hour course. All of them responded that their respective courses cannot have communication skills as an explicit learning outcome and cannot be mapped with the specific programme objective. The responses to the frequency and to what extent students' speaking-related activities are carried out in their respective courses in a trimester differ from one course to another. The responses to the questions like the number of times student's presentation take place in their course, to what extent students' oral communication is requiredin their course and whether the communication has been an evaluationcriterionor not, were recorded and analysed.

Out of ten respondents:

No. of Participants	No of Activities (GD/Presentation)	The extent of students' participation (Frequently/Moderately/Immoderately)	Communication, an evaluation component (Yes/No)
2	1- Presentation	Immoderately	No
6	1-Presentation, 1-Group Discussion	Frequently	Yes
2	1-Presentation	Moderately	No

All the respondents are under the impression that communication development takes place in communication class exclusively and half of them feel that it is practically notpossible to improve students' communication at this stage-'either they have it or they have not' is what they said. Fifty percent of the respondents agree that it can be developed if the equal emphasis is given to communication in all subject class but are apprehensive of the fact that it may consume more time and they foresee problemsin the collaborative teaching approach. Fifty percent of the teachers agree for collaboration with communication resource for evaluation of their written assignment. All teachers suggested for remedial classes to the poor and below-average students in Communication. All the teachers responded that they are not aware of the rubrics for oral or written communication and confessed that it is not possible to remember so many points as they are more focused on theirsubjectcontent on the slides that the students show during the presentation. Fifty percent teachers suggested Communication Across the Curriculum concept could be experimented for a year to enhance students' speaking skills and are open to collaborate with the Communication teacher.

4. Findings

Most of the respondents were not aware about CAC and development of discipline-specific communication. Majority of them hold onto their teacher-talk pedagogy and are not very keen on the student-talk pedagogy as they could consume more time . Fifty percent of the respondents showed reluctance to taking training on presentation skills and the rubrics for the evaluation. Most of them do not haveany idea of the communication skills development process and the discipline teachers' role in it. However, fifty percent of the respondents welcome an integrated and collaborative learningapproach and believe that communication skills can be an implicit course outcome in their respective subjects which ould be mapped with the programme goals. Embedding CAC across the curriculum is not practically possible as not all subject teachers are positive about CAC. Secondly and most importantly, there is less scope of speaking and writing in subjects like Accounting, IT, Statistics and even Finance. Some subject teacherslike OB & HR, Marketing, Economics were open to the idea of collaboration and show positive attitude towards embedding CAC. They also showed interest in taking the requisite training for evaluating the students. They were open for a change in the pedagogy and suggested it could be experimented for a year before the CAC programme can be implemented.

5. Conclusionand Suggestions

As has been establish by previous researchers that embedding CACprovides an opportunity to improve communication skills of the students. For CAC to be implimented effectively, the subject teachers must be positive and believe in this cross-curricular approach as their role is important in reinforcing these skills in their respective discipline. They have to be convinced of the fact that if the class pedagogy is mostly teacher-talk, students' talk will not improve. Students need to get sufficient opportunities to speak and write; then only learning to communicate and communicating to learn is possible. Teachers' concern regarding time constraint, loss of distinctive quality content and issues related to collaboration and implementation are genuine concerns which unless discussed and addressed by the Management, the implementation of CAC programme will be far from reality. Many studies have highlighted the fact that if students are to be mouldedinto skilled, confident and expressive, teachers can be risk-takers, can investigate their classroom practices, and should have the autonomy on the design of the curriculum and pedagogy. Effectively integrating speaking and writing skills into other subjects in higher education requires institutional support, a collaborationbetween CAC coordinatorsandsubject teachers so that students' communication skills can be effective and discipline-specific.

The teachers suggested that Speaking Across the Curriculumcould be introduced as an experiment. The students' ability to express themselves clearly and confidently is urgent and has been one of the most important selection criteria in their final placement. Therefore, a step by step process to

implement Speaking Across the Desired Discipline(SADD) is discussed below, followed by a suggested model in Figure 3.

5.1 Step by Step Process of the suggested Model for SAC
STEP 1

Subject teachers participate in workshops/one to one discussion on Presentation Skills and the rubrics for evaluation on Oral Proficiency/Speaking Skills.Students' proficiency in speaking in English language is to undergo a test to ascertain their present level.

Communication teacher assigns the students speaking related activities and gives individual feedback in his/her class

STEP 2

Subject teachers and Communication teachers discuss one to one to collaborate in the project SADD

STEP 3

Subject teachers maintain students' progress record on Speaking Skills(GD/Presentation) and map the course learning outcomes with the Programme Outcomes.

STEP 4

Communication teachers monitor the changes or progress across the curriculum in the individual students' level of proficiency

STEP 5

Based on the outcomes of the assessment after three terms, teachers record the students' progress or accomplishments. If it does not meet the expected level with some students, remedial sessions are to be taken in collaboration and again the required skills are tested.The diagnostic test after three terms is expected show that each student has been at least upgraded to the next or higher level of proficiency in speaking skills as per the CEFR.
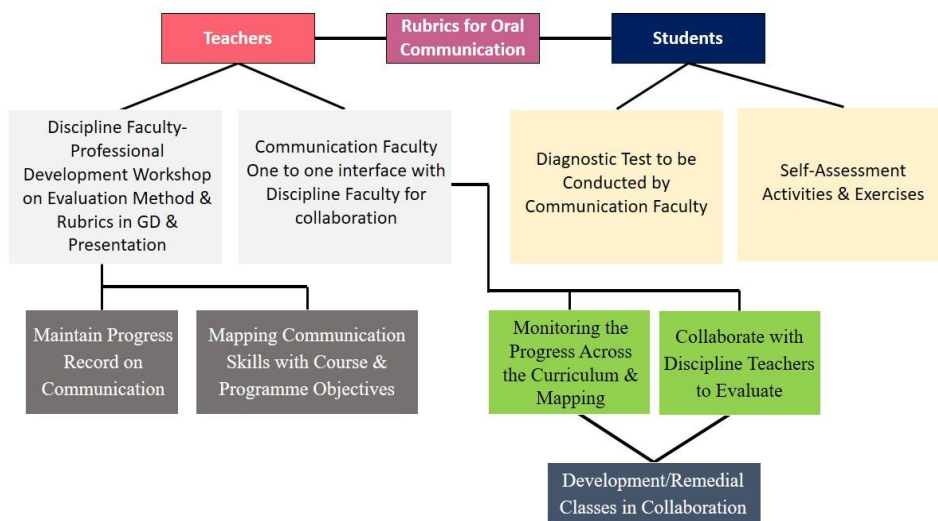

Figure 3: Enhancing Speaking Across the Desired Discipline(SADD)- A Suggested Framework

References

Arkoudis, S &Starfield, S. (2007). In-course language development and support.A discussion paperfor a National Symposium: English Language Competence of International Students. AustralianEducation International, Department of Education, Science and Training.

Australian Universities Quality Agency (2012).*English language standards for higher education*.ELSHE Steering Committee.

http://www.aall.org.au/sites/default/files/FinalEnglishLanguageStandardsMay2012.pdf

Barrett-Lennard, S, Chalmers, D &Longnecker, N. (2011). Embedding communication skills acrossthe curriculum: Helping students into their degrees and out into the workplace. In *First Year inHigher Education Conference*, Fremantle 28 June-1 July.

Burgess, H. (2004). "The Primary Strategy: A Chance for a Whole Curriculum." *Education* 3-11 32(2): 10-17.

Blackmore, P &Kandiko, C (Eds).(2012). *Strategic Curriculum Change: Global trends inuniversities*. London: Routledge.

Council for the Curriculum, Examinations and Assessment (CCEA). 2006. The Revised NI

Curriculum: Planning for Implementation. Belfast: CCEA. Accessed January 24, 2011. www.nicurriculum.org.uk/docs/background

Coe, J. (2010).' Areas of Learning."*Education* 3-13 38(4): 395-402.

Dannels, D. P. (2001a). Taking the pulse of communication across the curriculum: A view from the trenches.Journal of the Association of Communication Administration, 30, 50 71.

Dannels, D. P. (2001b). Time to speak up: A theoretical framework of situated pedagogy and practice for communication across the curriculum. Communication Education, 50, 144158.

Darling, J. (1994).*Child-Centred Education and its Critics*. London. Paul Chapman.

Darling, A.L., &Dannels, D.P. (2003). Practising engineers talk about the importance of talk: A report on the role of oral communication in the workplace. *Communication Education*, 52, 1-16.

Dannels, D.P., &Houseley Gaffney, A. L., (2009). Communication Across the Curriculum and in the Discipline: A Call for scholarly Cross-curricular Advocacy. Communication Education. Vol.58.1. 124-153

Greenwood, R. (2013). Subject-based and cross-curricular approaches within the revised primary curriculum in Northern Ireland: teachers' concerns and preferred approaches, Education 3-13: International Journal of Primary, Elementary and Early Years Education, 41:4, 443-458

http://dx.doi.org/10.1080/03004279.2013.819618

Gurukkal, Rajan(2020). Outcome Based Education. *Higher Education for the Future*(Editorial). Sage Publication. Vol 7. Issue 1

https://doi.org/10.1177/2347631119886402

Hayes, D. (2010). "The Seductive Charms of a Cross-Curricular Approach".Education 3–13 38 (4): 381–87.

Hay, E. (1987). Communication across the curriculum. Paper presented at the meeting of the Speech Communication Association, Boston, MA.

Jankovich.L.Jackie & Karen s. Powell. (2015). AnImplementation Model for a Communication Across the Curriculum Program. *Business Communication Quarterly,* Volume: 60 issue: 2, page(s): 9-19

Jacobs, C. (2007). Towards a critical understanding of the teaching of discipline-specific academicliteracies: Making the tacit explicit. *Journal of Education*, vol. 41, pp. 59-81.

Johnson, S, Veitch, S &Dewiyanti, S.(2015). A framework to embed the teaching, learning andassessment of communication skills across the curriculum. Paper presented at Teaching andLearning Forum.http://ctl.curtin.edu.au/events/conferences/tlf/tlf2015/abstracts.html#johnson

Johnson, S, Veitch, S &Dewiyanti, S.(2015). A Framework to Embed Communication Across Curriculum: A Design-Based Research Approach. JUTLP.Vol. 12, Issue.4.

Johnston, J. (2011). "The Cross-curricular Approach in Key Stage 1." In Cross-curricular Teaching in the Primary School: Planning and Teaching Imaginative Lesson, Edited by T. Kerry, 71-95. London: Routledge.

Krause, K L.(2012).Addressing the wicked problem of quality in higher education: Theoreticalapproaches and implications.*Higher Education Research & Development,* vol. 31, no. 3, 285-297.

Knight,P.(1993). *Primary Geography and Primary History*. London. David Fulton.

Kerry, T., and J. Eggleston.(1988). Topic Work in the Primary School. London: Routledge.

Laurie, J. (2011). "Curriculum Planning and Preparation for Cross-curricular Teaching." In Cross-curricular teaching in the Primary School: Planning and Teaching in Imaginative Lessons. Edited by T. Kerry, 125-151. London: Routledge.

Morrison, K. (1986). "Primary Schools Subject Specialists As Agents of School-Based Curriculum Change." *School Organisation.*6(2): 175-83.

McNamara, D. (1994). Classroom Pedagogy and Primary Practice. London: Routledge.

Oliver, B. (2015). *Assuring graduate capabilities*.http://www.assuringgraduatecapabilities.com

Olsen, R. (1996). The future of OCAC: An argument for the conceptual framing of the oral communication across the curriculum movement. Paper presented at the meeting of the Speech Communication Association, San Diego, CA.

Palmer, J. and D. Pettitt. (1993). Topic Work in the Early Years-Organising the curriculum for 4-8 years Olds. London: Routeledge.

Palmerton, P. R. (1990). Speaking across the curriculum: The Hamline experience. Paperpresented at the meeting of the Conference of College Composition and Communication,Chicago, IL.

Prajna.P & Anubha R. Opinion Mining: A Communication Tool for Career Making, Gedrag & Organisatie, Vol 33 (2), 501-511, ISSN 0921-5077.

Tann, S. ed. (1988).*Developing Topic work in Primary Schools*. London: Falmer Press.

Tomlinson, S. D. (1999). Communication across the curriculum: Status of the movement andrecommendations. Unpublished master's project, University of Washington, Seattle, WA.

Weiss, R. O. (1991). Southern Association of Colleges and Schools.Speaking Across theCurriculum, Vol 3, Issue 1.

Wood, E. (2011). "Cross-curricular Teaching to Support Child-Initiated Learning in EYFS and Key Stage 1."In Cross-curricular Teaching in the Primary School: Planning and Teaching Imaginative lesson. Edited by T. Kerry, 39-51. London: Routledge.