# Structures and Strategies that Affect the Organisation of Career Guidance Programmes in Second Cycle Schools

Theresa Dede Lawer

Department of Interdisciplinary Studies, College of Technology Education, Kumasi University of Education, Winneba, Ghana

#### Abstract

The research delved into structures and strategies that affect the organisation of career guidance programmes in second cycle schools in the Kumasi Metropolis of Ghana. The descriptive survey was used for the study, and it adopted both qualitative and quantitative research paradigms in gathering the data. A total of 432 subjects participated. Out of this number, 420 were students, 6 were Guidance Coordinators, and 6 were Heads of Institutions. It was found that among the six (6) Guidance Coordinators only tow (2) were professionally trained Counsellors. It also came to light that all the Guidance Coordinators were full-time teachers and as such could not devote much time for guidance and counselling activities. For a greater impact to be felt in the delivery of career guidance programmes there is the need for full-time professionals who would have ample time, and also devise various activities that promote career education in schools.

Keywords: Structure; Strategy, Organisation, Career, Guidance, Counselling, School

## 1. Introduction

Educational changes must go beyond mere diversification of the curriculum if the changes should be a means of helping students to have integrated personality to realize their true potentials. Guidance is therefore expected to be an essential component of the educational system to facilitate students' decisions in the selection and appropriate combination of subjects or courses that best suit their aptitudes and aspirations for the future world of work. A comprehensive school guidance programme is a developmental sequential and continuous programme of counselling, consultation, appraisal, information, orientation and placement services for all students from kindergarten through to the higher level of education. The programme becomes an integral part of the total educational experience, and seeks to focus attention on individual students as they strive to make useful choices based on realistic concepts of themselves and the world in which they live. Thus, for Shertzer and Stone (1976), guidance should serve the purpose of making sure that the students, the teachers and the parents understand the various phases of the individual's development and their impact on the growth, adjustment, and decision-making process. To them the programme of guidance is therefore intended to help students to:

- demonstrate personal and academic growth,
- make appropriate educational and career decisions, and
- develop interpersonal skills and attitudes necessary for success.

Hence, according to Gibson and Mitchell (1990), the desired outcome of counselling is self-realization and self-direction on the part of the student (client). This renders school counselling as the focal point in planning and decision-making.

Imperatively, vocational or career guidance which is inherent in information service helps individuals to identify their own talents, strengths and weaknesses, family expectations, and national requirements in order to sort out the personal relevance of the educational and career options available. Career guidance service goes a long way to inform students' decisions about their subjects of study which obviously lead to appropriate career decisions.

Guidance programmes are indispensable in schools for the fact that they are of great benefits to students. The world continues to undergo substantial changes industrially, occupationally, socially, and economically. These changes are creating substantial challenges for children and young people. A rapidly changing work world and labour force; violence in homes, schools and communities; divorce; substance abuse; suicide, sexual experimentation, and teenage pregnancy are just a few examples of these challenges. These challenges are real and they are having serious impact on the personal/social, career and academic development of children, young people, and even adults in our society. In response, a comprehensive guidance programmes are necessary in assisting children and young people, along with their parents to respond to these similar challenges. It is therefore satisfying to have guidance programmes in schools as empirical research has documented that when school counsellors have time, resources and the structure of a comprehensive programme to work in, the following good things happen:

- > Guidance and counselling interventions improve academic achievement
- Students take demanding courses
- Students develop and use career plans
- Schools have more positive climates

In addition to the above, the following are also some of the justifiable reasons for the inclusion of guidance programmes in our school.

Guidance programmes are needed in schools to enhance personal growth and development of students as well as help students to adjust to the new environment in which they find themselves. They also help students to develop healthy interpersonal relationship for healthy growth. Guidance programmes enable students to develop skills to manage personal/social conflicts and its life related problems. Guidance programmes are very essential to effect the necessary attitudinal change among students. Guidance is needed in our schools to direct students' academic and educational goals. It assists and facilitates students in developing and managing skills toward eventful educational achievement. Students are helped to understand the self so as to facilitate meaningful decisions toward their educational goals and aspirations.

Guidance and counselling is also very important to ensure a smooth transition from school to the world of work. Students are guided to make right career choices that match their abilities, aptitudes, interests, capabilities which eventually aid them to settle for suitable careers. Students are assisted with much information concerning the world of work and their personal self for better career decisions. Effective guidance structures in schools further promote teamwork and cooperation among teaching staff as well as with administration staff. Parents are also educated about their primary role in the development of their wards. These bodies collaborate in bringing the best in students.

The above discussions clearly define the roles and responsibilities of school guidance programmes and show the necessity of guidance and counselling for the overall educational development of every student in order to make learning a very positive experience. The purpose was to find about the strategies and structures that are put in place to facilitate the organisation of career guidance programmes in senior high schools.

#### 2. The Need for Guidance programmes in Schools

Assoah (2004) quoted Pecku (1991) as arguing that generally, education should aim at:

- creating an intelligent and inventive personality capable of contributing his or her quota to the development of society,
- > helping its citizens to acquire skills that will enable them make a living, and
- > perpetuating the culture of the society.

The above aims of education can only be fully realized through effective guidance service. According to Uba (1990), for education to be functional, child-centred and job-oriented, the guidance service should be an integral part of our educational system. This then makes the school, and for that matter, any educational institution responsible for the development of students' competencies in intellectual functioning, relationships, communication and problem-solving skills (Dinkmeyer & Caldwell,1970).

It is therefore clear that accurate knowledge of educational and vocational training requirements is essential to the development of realistic and congruent educational and occupational aspirations of an individual and a country as a whole. In order to provide that "accurate knowledge", the Ghana Government in 1976 issued the first directive on establishment of guidance and counselling programme in the nation's second cycle institutions. The second directive was in 1982 for the introduction of guidance and counselling programme in the first cycle schools. These then brought into operation formal guidance and counselling services in the nation's first and second cycle institutions.

In addition to the 1976 and 1982 directives, the University of Cape Coast (UCC) was made responsible for the training of counselling personnel and, as a temporary measure, the Institute of Educational Planning and Administration (I. E. P. A.) of the University of Cape Coast was given the mandate to train selected teachers from second cycle institutions as Guidance Coordinators. The directive, which established guidance and counselling programme in the first cycle schools, requested the organisation of in-service training courses in guidance and counselling for head teachers to equip them to play the role of Guidance Coordinators in their schools (Ackummey, 2003).

Knowing oneself and the opportunities that exist in one's environment and also knowing what one can do to meet employer's preference can help an individual make a good career adjustment. Walton (1966), cited by Bojuwoye (1977), explained the term vocational guidance to be the process of helping a person match his personal attributes and his background with suitable jobs and employment opportunities. This definition, according to Bojuwoye, is in consonance with the definition of vocational guidance first given by Frank Parsons in 1908 when he wrote, that the vocational bureau is intended to aid young people in choosing an occupation, preparing them for it, finding an opening in it, and building up a career of efficiencies and success. Napier (1972) also states that vocational guidance may be viewed as "the process by which all the various factors affecting individual occupational choices are sorted out, weighed and brought into focus and by which the young person is helped to make his choice in the full knowledge of the fact about his own potential to them" (p. 18).

In its entirety, vocational guidance could be said to be made up of experiential activities and procedures which span over time. A primary concern of vocational guidance is therefore the assistance offered to the

individual in making decisions and choices necessary in planning a future and building a career. Hence, a major theme in the developmental theories is the assertion that career behaviour changes systematically in certain ways with increasing age. That is, the more a person advances in age, the more mature is his or her career development outlooks.

#### 2.1 Empirical Review

In 1991, Semingson examined the perceptions of Regis High School students on the schools' career counselling programme. The result suggested that the programme could be beneficial to students. Also, a study by Drier and Bebris (1989) reported total student outcomes in specific competency areas. Knowledge of career and educational opportunities, the work world, and the process of career planning accounted for eighty-one percent of reported outcomes, leaving some competency areas lacking. No participant reported life roles competencies.

Other studies (Hoyt & Lester, 1995; Stanton, 1990) found a clear need for increased and improved career counselling services. The results of the various studies discussed here show divergent outcomes of career guidance programmes. Following national guidelines for career guidance programmes is important to ensuring the most comprehensive and consistent services for all students.

Some studies have solicited suggestions about what works and what needs to improve within career guidance programme. For example, in a study by Nevo (1990), students reported that the most effective or valuable career service was individual discussion with a counsellor. Interest inventories, objective tests, and vocational information followed in importance.

Newton (1994) examined the perceptions of D.C. Everest High School graduates on the school's career guidance programme. Newton found three most common suggestions from the students; market the existing programme more, require or mandate bi-yearly or yearly appointments with the counsellor, and provide more indepth information. A considerable amount of research has focused on evaluating the influence of different factors on career decision making. Several studies have found that counsellors and school activities were ranked lower than other factors (family, friends, job experiences) in providing assistance with career decisions.

#### 3. The Study Design

The descriptive survey was chosen for the study for the fact that it determines the status of a given phenomenon as contended by Osuala (2001). The design is also highly regarded by policy makers in educational research; as data gathered by way of descriptive survey represents field conditions. The study adopted both the quantitative and qualitative research paradigms. The instruments for the data collection comprised of questionnaire for students and interview schedule for school administrators, counsellors and some selected students.

## 3.1 Participants of the Study

The target population for the study was all public senior secondary schools in the Kumasi Metropolis, school administrators and guidance coordinators/counsellors in the schools. A random sampling strategy was used to select a representative number of schools for the study. A sample size of six schools was adopted. Two schools each from a stratified schools of same-sex boys or Girls), and co-educational were used. The study was limited to the S.S.S 3, 2007 final year students. These students were used for the study because they were at the terminal point of a level of education and were about to further their studies or to enter the world of work, and were therefore more likely to be considering the kind of jobs they would enter after school, or educational pursuits. Furthermore, this category of students has stayed long enough in the schools to be aware of the guidance services available in the schools. Finally, this group was chosen because they were concerned with choices of jobs they would enter after school, or educational pursuits. The views of the coordinators/counsellors and heads of institutions were also sought to verify students' responses on the extent of career guidance offered in the schools. This was to triangulate the responses especially with the qualitative data.

## 3.2 Data Analysis

The data obtained was analysed using the descriptive statistics. The descriptive statistics (mean and percentages) was used to analyze the research questions. The data was coded into the Statistical Package for Social Sciences (SPSS) for Windows Version 11.0 Software. The data were in frequency tables and percentage. The interview responses were transcribed and analysed, using the thematic approach.

In the bid to solicit response concerning structures and strategies that affect the organisation of career guidance in the schools, questionnaire and interview schedule were employed. The following information was gathered from students, guidance coordinators and school administrators of the participating schools. Three of the items on questionaire sought to find out the value placed on career guidance in the schools since the importance attached to it would show how often various activities are organised in that direction to meet career needs of students. These are students' response to that effect.

## 3.3 Results

Respondents were asked to indicate the type of guidance services they benefited from. Table 1 presents the distribution of the responses.

Service	Frequency	Percent	
Orientation	216	51.7	
Counselling	116	27.8	
Career guidance	59	14.1	
Missing	27	6.5	
Total	418	100.0	

## Table 1: Guidance Services Students Benefit from

The results in Table 1 show that 216 representing 51% of respondents reported benefiting from orientation service, 166 representing 27.8% benefited from counselling, while 59 representing 15.1% benefited from career guidance. However, 27 representing 6.5% did not select any of the responses, which indicate they did not benefit from any of the available options.

Another item further probed to ascertain the organisation of career guidance programme during students' three year stay in the various schools. The result is presented in Table 2.

#### **Table 2: Organisation of Career Guidance Programmes**

Tuble 2, organisation of our eer Guldanee Trogrammes				
Response	Frequency	Percent		
No	122	29.2		
Yes	291	69.6		
Missing	5	1.2		
Total	418	100.0		

From table 2, it is evident that schools organise career guidance programmes for students. This is shown by 291 representing 61.6% respondents saying 'yes' to the item, while 122 representing 29.2% respondents saying 'no'.

For the frequency of the organisation of the career guidance activities, an item on the questionnaire asked about the number of times career activities were organised within the three-year of students' stay in school. The result is presented in Table 3.

Table 5. Number of times Career Activities were organised within Three Tears				
Response	Frequency	Percent		
Once	82	19.6		
Twice	64	15.3		
More than twice	154	36.2		
Missing	120	28.9		
Total	420	100.0		

## Table 3: Number of times Career Activities were organised within Three Years

From Table 3, 154 (36.2%) respondents indicated that during their three year stay in school, career guidance was organised 'more than twice', 64(15.3%) respondents said 'twice', while 82 (19.6%) respondents indicated 'once'. However, 120(28.9%) respondents did not choose any of the options since they earlier on said no career guidance programme was organised.

The results above depict the prevalence of the organisation of career guidance programme in the schools. However, the frequency of guidance activities may not be adequate.

Views were further sought during the interview session with participants to verify the organisation of guidance activities. It was found out that the schools organised orientation programme for first year students at the beginning of every academic year. Guidance talks were also regularly organised in some of the schools studied. Two of the coordinators had these to say:

'We organise orientation for first year students. There's something we call guidance talk on every Monday to discuss issues such as 'peer pressure' 'how to study', 'HIV/AIDS, and a whole lot'. (Coordinator)

'On Fridays of every week masters are involved to talk on some given topics'. (Coordinator)

Interviewees were allowed to comment on their responsibilities. It came up that Guidance Coordinators were full-time teachers. Most of them perform other activities in addition to the coordinating work. Some of them had these to share:

'I teach eight (8) periods per week and organise all religious activities as well'. (Coordinator)

'I'm actually involved in a lot of activities in this school. I teach for sixteen (16) periods; I'm the examination officer and I also take part in the administration of the school'. (Coordinator)

'I don't have time for the guidance & counselling work at all. I teach twenty-five (25) periods per week; I don't even have an office to meet students and discuss their concerns'. (Coordinator)

Coordinators and Administrators expressed concern about the fact that Coordinators were saddled with so many other activities that they did not have enough time for the guidance activities. They mentioned the need for full-time counsellors to provide comprehensive career service. It was also said that G.E.S should reconsider

the practice of making students choose their programmes of study at the Junior Secondary Schools, and it should provide funds for the running of guidance programmes. Here are some of the comments:

'Second cycle institutions actually need full-time counsellors, who are trained, employed and paid for the guidance and counselling work they do'. (Administrator)

'I'll also suggest that G.E.S reconsiders its decision of making students choose the courses or programmes in the basic schools. I'm saying this because students at that level don't understand much of what they do there. It's in the senior secondary school that some of them come into reality of what they want to do in future. (Coordinator) Students need a lot of information about different local occupations but what do we have? All we have are

foreign materials on foreign schools. You see the brain-drain! So there should be full-time counsellors who will be in charge and do 'proper' career activities for students to have brighter future. (Coordinator)

Notwithstanding the challenges and the fact that students come to the senior secondary school with already chosen field of study, they were assisted in any way possible to strive through their chosen programmes toward appropriate career choices. For instance, activities such as orientation, guidance talks, and career conference were organized in some of the schools to help students make informed decisions. Students were also provided with some information materials on subjects and their related careers and institutions that run such programmes. Here are some comments from respondents:

'Orientation programme is organized for fresh students to explain to them the various subject combinations and the related careers'. (Administrator)

'Guidance talk is organized to address most of these issues'. (Coordinator)

'The guidance talks that we have been having on every Thursday give me most of the information I need to know about what I want to do in future'. (Student)

The researcher enquired about the existence of counsellors in the schools since there may be no effective guidance programme without professional counsellors. It came up that there had been coordinators since the establishment of the schools – most of whom were the chaplains of their schools, though not professional counsellors.

'There has been a coordinator in this school since its establishment. This is because it is the chaplain that takes on the activities of guidance and counselling'. (Administrator)

'I would say there have always been a coordinator since the chaplain always acts as the coordinator for guidance and counselling activities'. (Administrator)

Most of the schools also had something they called 'guidance team'. This team was headed by the coordinator and they organised orientation programme for first year students. They also undertook other activities as well. The peculiar thing about the team in almost all the schools was that it handled disciplinary matters. All said and done, the schools contributed in any way possible toward the running of guidance programme in schools. The following views were gathered during the interview session:

'I must say that most of the counselling activities here are focused on disciplinary matters'. (Coordinator)

'Well, the guidance team caters for guidance and disciplinary issues'. (Coordinator)

'We sometimes organise talk and use our teachers – especially the heads of departments to expose students to various possible career opportunities'. (Coordinator)

'There is a team to help execute some of the guidance and counselling activities. We organise orientation programme for fresh students'. (Coordinator)

*'We help financially and with human resource'.* (Administrator)

The researcher further enquired about the contribution of G. E. S toward the implementation of guidance and counselling services in the schools. It came to light that G. E. S once a while invited guidance coordinators for workshops, but that there was no financial help. Some Administrators and Guidance Coordinators had these to say:

'The only help from G.E.S is organization of workshops for guidance and counselling coordinators'. (Administrator)

'The only contribution from G.E.S is that once a while it invites coordinators for workshop. No financial aid for running guidance and counselling programmes'. (Administrator)

'The Regional Coordinator for guidance and counselling sometimes invites us for workshops. Apart from that there is no financial support for guidance activities'. (Coordinator)

No programme can be successfully run without funds. Thus, with the revelation of the fact that there was no financial assistance from the Ghana Education Service (G. E. S), the researcher requested to know how the schools managed to run career guidance programmes in the schools. It was found out that the schools helped by providing funds and human resources, when need be, to run the guidance services in the schools. An Administrator and a Coordinator had these to say:

*'We sometimes organise talk and use our teachers – especially the heads of departments to expose students to various possible career opportunities'.* (Administrator)

'We help financially and with human resource.' (Coordinator)

During the interview session, respondents raised a number of themes that they believed had gone a long way to sustain the running of career guidance in particular, and other guidance services in general. They mentioned themes like, office for coordinator, giving feedback to heads of institution, formation of guidance committee, school's contribution in running guidance programme, and general assessment of career guidance service in the school. Here are some of the comments made:

'Since the chaplain coordinates activities of guidance, he uses his office'. (Administrator)

'The coordinator has no office but he uses his premises for guidance and counselling activities since he lives on campus'. (Administrator)

Coordinators report back on their activities to their various heads of institutions.

'He always keeps us informed of whatever goes on there'. (Administrator)

'We are in the know of the guidance and counselling activities the coordinator carries out'. (Administrator)

Existence of cumulative records and its usefulness in guidance work also came up during the interview with the guidance coordinators. It so happened that almost all the schools the researcher sampled had changed from the use of cumulative records book to the use of files.

'We were initially using cumulative records but it has now phased out. They now have files and all information about student is kept in the files'. (Coordinator)

'The use of cumulative records in the second cycle institutions is not very effective. In this school, we have computerized every information about students from form one till they complete school'. (Coordinator) 'It seems there is nobody to work on them so it's no more in use'. (Coordinator)

At the end of the interview session, the researcher asked participants about their comments on the career guidance programme. Participants were of the view that government should financially support guidance programmes and provide professional counsellors for guidance activities in the schools. They also suggested learners should be made to select their programmes of study when they reach senior secondary school and not while in the junior secondary school. Administrators expressed some satisfaction about career guidance and the other guidance programme in general. However, they were of the view that government should help sustain the programme. Here are some comments:

'G.E.S should help financially and provide professional counsellors for the work'. (Administrator) Government must play realistic role in running the guidance and counselling programme and revise the

Government must play realistic role in running the guidance and counselling programme and revise the situation where subjects or programmes are selected before entering the senior secondary school. (Coordinator) I must say it's not so encouraging. I attribute this to the fact that the counsellor is not operating full-time. He teaches as well and less time is given to counselling work. He already has a lot to do as a classroom teacher. (Administrator)

#### 4. Conclusion

It takes professionals to effectively implement guidance and counselling services and for that matter, career guidance programmes in school. But, if the greater number of such service providers were not professionals, and were also saddled with teaching load, then the ineffectiveness in the delivery of career guidance programmes could be attributed to lack of professional counsellors. The implication is that the required programme delivery is affected by unprofessionalism, lack of knowledge, and commitment. Also, implementation of career guidance activities involves a lot of money and so it is unthinkable that G.E.S. provides no funds for the running of guidance and counselling services. Furthermore, there was no written Standards guiding the running of the career guidance for the second cycle schools and this might have contributed to the programme ineffectiveness.

## 5. Recommendation

The results of the study indicated that four of the guidance coordinators in the schools were not professional counsellors. It is therefore recommended that the schools should recruit professional counsellors so that they will be fully employed for guidance and counselling activities.

Guidance Coordinators should be shed off extra responsibilities so as to have ample time to organise enough activities to promote career education in the schools. When Coordinators have ample time, they will be in the position to give their best toward the improvement of the running of career guidance programme. Also, due to lack of funds, guidance coordinators were not in the position to organise career conferences, career days, career talks and visits to places of work in the localities. The funds would be used to finance the above mentioned activities as it would also enable schools to secure resource materials for students to access information for themselves. It is recommended that the Ghana Education Service (G. E. S) should make budgetary allocations for the implementation of guidance programmes to ensure their smooth and effective delivery in schools.

Career programme should be implemented based on an established national standard. School guidance programmes, must be evaluated using a national standard against which the implemented programme would be measured. There should also be guidance programme personnel with job descriptions derived directly from the

national standard so that evaluation forms can be developed and used for formative and summative personnel evaluation.

Furthermore, counsellor training institutions should incorporate into their curriculum programme evaluation skills for the benefit of counsellor-trainees. Also, the institutions should further emphasize the importance of developing and utilizing career programmes and national standards and corresponding curriculum with students.

#### References

- Ackummey, M. A. (2003). Organisation and Administration of a School Guidance Secondary Programme. Accra: Media Graphics and Press Limited
- Assoah, S. (2004). Evaluation of Guidance and Counselling service in the Sefwi Aowin-Suaman and Wassa Amenfi Districts of the Western Region. M.Phil. Thesis. University of Cape Coast.
- Bojuwoye, J. O.(1977). Analysis of Current Guidance Services in Kaduna State Secondary Schools. Unpublished Master of Education Degree Thesis, Department of Education, Ahmadu Bello University, Zaria

Dinkmeyer, D. & Caldwell, E. (1970). Developmental School Approach. McGraw-Hill Books Co.

- Drier, H. N., & Bebris, J.(1989). Effects of Career Guidance 1988-1989. Report Ohio's Investment in Career Guidance Program Improvement through the Carl D. Perkins Grants to Vocational Districts (Report No. CE 054 031). Columbus, OH: Ohio State University, Center on Education and Training for Employment. (ERIC Document Reproduction Service No. ED 314 643)
- Gibson, R. L. & Mitchell, M. A.(1990). *Introduction to Guidance and Counselling*. (3<sup>rd</sup> ed.), New York: Macmillan Publishing co.
- Napier, R. (1972). School Guidance Services: Focus on the Developing Nations. London: Evans Brothers Ltd.
- Nevo, O. (1990). Career Counseling from the Counselee Perspective: Analysis of Feedback Questionnaires. *The Career Development Quarterly*, 38(4), 314-324.
- Newton, P. L. (1994). A follow-up Study of 1989 Graduates of D. C. Everest High School Concerning Career Selection and Perceptions of the School's Career Guidance Program. Unpublished Master's Thesis, University of Wisconsin-Stout, Menomonie.
- Osuala, E.C. (2001). Introduction to Research Methodology (3rd ed.), Ibadan: Africana Feb Publishing Ltd.
- Shertzer, B. & Stone S.C. (1976). Fundamental of Guidance (3rd ed.), Boston: Houghton Mifflin Company Ltd.
- Stanton, L. A. (1990). A follow-up study of the 1984, 1986, and 1988 Gilman High School graduates. Unpublished master's thesis, University of Wisconsin- Stout, Menomonie.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: <u>http://www.iiste.org</u>

# **CALL FOR JOURNAL PAPERS**

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

# MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

# **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

