# The Norman Paterson School of International Affairs

Paterson Hall, level 2A

# The School

Director of the School:

C.J. Maule

Associate Director:

Martin Rudner

The Norman Paterson School of International Affairs, established in 1965 with the generous support of the late Senator Norman M. Paterson, offers a program of studies leading to the M.A. degree.

The program focuses on three themes:

- · Conflict Analysis
- Development Studies
- Political Economy

The program affords students the opportunity to focus on Canada in international affairs through specialized courses related to each of these themes. The program also allows students to focus on international management issues rele-vant to governmental and non-governmental

organizations and international enterprise. Attention is also paid to the role of international institutions, the foreign policies of other countries, and to selected regional studies. The school maintains close cooperation with the Institute of Soviet and East European Studies, and with committees designed to encourage and coordinate faculty and student interests in Africa, Asia and Latin America.

A specialized resource center is located in the school and is staffed by a full-time information specialist. Students and faculty have access to a broad range of current bibliographic materials, using the resources of the national capital area as well as online computerized bibliographic services in foreign policy and international affairs. The school also participates in the Social Science Data Archives at Carleton, and students have

access to a full range of data sets available from the Inter-University Consortium for Political Research, as well as the Canadian Institute of Public Opinion poll data and the Human Relations Area Files.

# **Qualifying-Year Program**

# **Admission Requirements**

The qualifying-year program is designed to enable students with at least high honors standing, but with an inadequate background in the disciplines relevant to the M.A. program, to make up deficiencies. Candidates with a high standing in a general (pass) bachelor's degree, in a discipline closely related to international

affairs, will be required to take five qualifyingyear courses before being eligible to enter the master's program. Those with an honors bachelor's degree in an unrelated discipline may be required to take at least three qualifying-year courses before being eligible to enter the master's program.

Students in the qualifying year are encour-aged to select a core theme. They may also wish to select an area emphasis and to take courses that will enable them, in the M.A. year, to engage in specialized study in the problems of a region having particular relevance to the core theme they have elected. Students should also take appropriate courses in order to prepare them to fulfill the language requirements of the M.A. program.

Admission to the qualifying year does not guarantee admission to the M.A. program. To be considered for admission to the M.A. program, students in the qualifying year are expected to achieve the equivalent of high honors standing. Students in the qualifying year are considered for admission to the M.A. program at the same time as other applicants; if qualifying-year students are not admitted to the M.A. program in the first round of admissions, subsequent decisions on their admission will depend on performance and the availability of space in the M.A. program.

# **Program Requirements**

Conflict Analysis

Students will normally enroll in Political Science 47.361 and 47.365, or 47.460. Students who have not already taken an introductory course in international politics should enroll in Political Science 47.260. Courses in anthropology, economics, geography, history, law and sociology, among other disciplines are recommended as well as courses concerned with alternative

approaches to conflict and conflict resolution, and area studies.

#### **Development Studies**

Students will normally enroll in Economics 43.363. Students who have not already taken an introductory economics course should enroll in Economics 43.100. Courses related to development studies in anthropology, geography, history, law, political science, and sociology, among other disciplines are recommended as well as courses concerned with international economics and politics, and comparative and area studies.

#### International Political Economy

Students will normally enroll in Political Science 47.361 and 47.365, or 47.460, and Economics 43.360, or 43.361 and 43.362. Students who have not already taken an introductory economics course should enroll in Economics 43.100. Courses in anthropology, geography, history, law, and sociology, among other disciplines, are recommended as well as courses concerned with

political economy, the state, economic history, and comparative and area studies.

#### **Master of Arts**

# **Admission Requirements**

The minimum requirement for admission into the master's program is an honors bachelor's degree in a discipline related to international affairs. Under current practice, at least a high honors standing is normally required for consideration for admission to the program.

Students may wish to provide scores on the Graduate Record Examination aptitude test in order to assist the admissions committee.

The Faculty of Graduate Studies and Research requires applicants whose native tongue is not English to be tested for proficiency in English, as described in the application for admission section, page 15 of the general regulations of this calendar.

Candidates who lack the required background in international affairs will be expected to complete a maximum of two additional courses. Core seminar requirements are listed under program requirements for qualifying year.

Students admitted to the *Conflict Analysis* core are strongly encouraged to complete a senior undergraduate course in conflict theory as well as courses in the social sciences, history, and law before beginning their programs. Students who have not completed a senior undergraduate half-course in conflict theory will be required to take such a course as part of their program requirements.

Students admitted to the *Development Studies* core are strongly encouraged to complete an

undergraduate half course in development economics before beginning the M.A. program. Otherwise, this requirement (additional to the M.A.) will have to be taken simultaneously with the M.A. program, and may result in some delay in its completion.

Students admitted to the *International Political Economy* core must complete an introductory economics course prior to entry in the M.A. program. Students are also strongly encouraged to complete undergraduate courses in political economy, international economics, and international politics, as well as courses in geography, history, law and sociology before beginning their programs. Students who have not completed a course in international economics will be required to take International Affairs 46.538 as part of their program requirements.

# **Program Requirements**

The normal program requirements for M.A. students in international affairs are:

 One interdisciplinary core seminar or equivalent selected from the following:

International Affairs

46.500 Theories and Approaches to International Political Economy

46.505 and 46.507

**Development Studies** 

46.515 Conflict Analysis

- Two other approved courses (or the equivalent) in international affairs or related disciplines, if a student elects to write a thesis
- Three other approved courses (or the equivalent) in international affairs or related disciplines, if a student elects to write a research essay
- A thesis (valued at two credits) or a research essay (valued at one credit) involving original research on an approved subject in the field of international affairs
- Full-time students are expected to submit a thesis/research essay proposal by the end of January following their first term of study in the program; part-time students are expected to submit a thesis/research proposal after completion of half of their course requirements
- An ability to read a second major international language, or a language appropriate to a student's major research interest
- An oral comprehensive examination on the thesis or research essay in their general field of study to determine the candidate's ability to relate various disciplines to the study of international affairs
- English-speaking Canadian students are expected to develop a proficiency in French

## **CONCENTRATIONS**

Students in all three core seminars may, if they wish, choose to focus their studies on one of four concentrations as part of their overall program.

The concentrations, designed to permit some specialization within the context of the M.A. degree, will be structured around particular sets of courses selected in consultation with a faculty ad-

#### **Canadian Concentration**

This concentration focuses on Canadian policies and activities in international affairs. It will be of interest to students wishing to focus their studies on the formulation and implementation of Canadian foreign policy in the areas of international security, trade and investment, or development assistance. The concentration will include:

- one of the three interdisciplinary core seminars
- one of International Affairs 46.511, 46.512,
- a thesis or a research essay on a Canadian theme

## **International Management** Concentration

Students may elect to include international management as part of their program in the school. This concentration will emphasize aspects of the international environment in which man-agers in the public and private sectors make deci-sions. It will be of particular interest to students who wish to pursue careers in international government and non-governmental organizations, international banking and multinational enter-prises. The concentration will be designed in

consultation with a faculty coordinator and will include:

- one of the three interdisciplinary core seminars
- International Affairs 46.544
- courses from among those offered by the School of International Affairs, and by the Schools of **Business and Public Administration**
- a thesis or a research essay on an international management theme

Students who have not completed a course in international economics will be required to take International Affairs 46.538 as part of their program requirements.

#### **Environment Concentration**

This concentration focuses on international aspects of the natural environment, including the relationship of the environment to development, environmental concerns of higher-income coun-tries and global or planetary issues. The concen-tration will

- one of the three interdisciplinary core seminars
- one of International Affairs 46.570 or 46.571
- a thesis or research essay on an environmental

## **Trade Policy Concentration**

This concentration emphasizes the formulation, administration and consequences of trade and trade-related policies. It will be of interest to those who

wish to pursue careers in the trade policy area. The concentration will include:

- one of the three interdisciplinary core seminars
- International Affairs 46.540
- a thesis or research essay on a trade policy theme

Students will require International Affairs 46.538 or equivalent as a prerequisite for 46.540.

## **Academic Standing**

A grade of B- or better must be obtained in each course credited towards the master's degree. The school does not permit exceptions to this rule.

# **Career Planning**

Students interested in continuing to doctoral programs should plan their programs to include courses in their discipline, if other than international affairs, which may be deemed necessary for their admission to doctoral programs. Interdisciplinary doctoral programs in international affairs are given in a number of institutions and the faculty can provide guidance in planning for these programs.

Recent experiences of students show that a strong background in research methods and economics enhances job placement, and students may wish to take this into account in planning their course program.

School faculty can provide advice on careers in government, international governmental and nongovernmental organizations, and in the private sector.

## Master of Arts/Bachelor of Laws

The Norman Paterson School of International Affairs and the Common Law Section of the Faculty of Law at the University of Ottawa offer a joint Master of Arts in International Affairs and Bachelor of Laws degree (M.A./LL.B.).

#### **Admission Requirements**

A student must make separate applications to the School of International Affairs at Carleton University and to the Faculty of Law at the University of Ottawa and be accepted by both institutions in accordance with the normal

admission requirements of each program. Interest in pursuing the joint program must be specified in each application and a joint committee will make a decision on admission to the joint program.

#### **Program Requirements**

A student will complete both the M.A. and the LL.B. programs over a four-year period. Students will be expected to fulfill the normal requirements of both the M.A. and LL.B. programs. In addition, students in the joint program will be requir-ed to complete courses in international law to be specified by the Faculty of Law. The normal sequence of courses for the two degrees is as follows:

First Year

· Normal LL.B. first year.

Second Year

 Normal M.A. first year (required course work to include a half-credit course in international law, plus commencement of M.A. research essay/thesis)

#### Third Year

 Normal LL.B. second year, including one halfcredit course from the School of International Affairs for which credit will be given in the LL.B. program,\*\* and continuation of M.A. research essay/thesis

#### Fourth Year

 Normal LL.B. third year, including one halfcredit course from the School of International Affairs for which credit will be given in the LL.B. program,\*\* and conclusion and defense of M.A. research essay/thesis

\*\*These two half courses in the School of International Affairs taken as credit toward the LL.B. will be additional to those required for the M.A. degree.

## **Graduate Courses\***

Part-time students are permitted to enroll in a maximum of two half courses per term.

## **Core Seminars**

• International Affairs 46.500T2
Theories and Approaches to International
Political Economy
A study of global political economy, with
empha-sis on historical development, regional integration, and contemporary institutional structures.

Prerequisite: M.A. standing in the Norman
Paterson School of International Affairs or
permission of the school.

• International Affairs 46.505F1 or W1 International Dimensions in Development Studies

Issues in development financing, international trade, industrialization and technology transfer, food and natural resources, and the role of international organizations.

*Prerequisite:* M.A. standing in the Norman Paterson School of International Affairs or permission of the school.

• International Affairs 46.507F1 or W1 Theories of Development and Underdevelopment A comparative analysis of approaches to the study of development processes and underdev-elopment, including structural-functional, neo-classical, Marxist, and dependency theories.

\*Prerequisite: M.A. standing in the Norman Paterson School of International Affairs or permission of the school.

*Note:* Students electing *development studies* as their core seminar will be required to complete both 46.505 and 46.507.

• International Affairs 46.515T2 Conflict Analysis

A seminar comparing conflict theory drawn from strategic studies, peace research, and the social sciences, with applications to East-West conflict, regional conflicts, arms races and arms control, crisis management, and terrorism.

*Prerequisite:* M.A. standing in the Norman Paterson School of International Affairs or permission of the school.

#### **Canadian Concentration**

• International Affairs 46.511W1 Canada in the International Political Economy Analysis and evaluation of Canada's relationships and policies within the context of the international political economy.

Prerequisite: Enrollment in International Affairs 46.500 or permission of the school.

• International Affairs 46.512W1 Canada and International Development Analysis and evaluation of Canada's policies and programs with respect to international development.

*Prerequisite:* Enrollment in International Affairs 46.505 and 46.507, or permission of the school.

• International Affairs 46.513W1 Canada and International Conflict Analysis and evaluation of Canada with respect to international conflict and conflict resolution. *Prerequisite:* Enrollment in International Affairs 46.515 or permission of the school.

# **Other Courses**

• International Affairs 46.506F1 or W1 Agriculture and Rural Development A study

of the

agricul- \*F,W,S indicates term of offering. Courses offered in the fall tural and winter will be followed by T.

sector, rural areas,

The number following the letter indicates the credit weight of the course: 1 denotes a half-course credit, 2 denotes a full-course credit, etc.

and rural welfare in developing countries, including consideration of structural change in agriculture, agrarian reform, rural development strategies in various countries, and public policies affecting agriculture, activities ancillary to agriculture, rural industry, and public service.

- International Affairs 46.508F1 or W1 Development Planning: Theory and Practice Third World development plans and strategies and their impacts; techniques employed in devel-opment planning, including social cost-benefit analysis, budgeting, and problems in development administration.
- International Affairs 46.520F1 or W1 Strategy in the Nuclear Age
  This course examines the relationships among nuclear weapons, national security policy and international affairs. Topics include the nature and effect of nuclear weapons, strategies for their use and non-use, the history of nuclear forces and doctrine since World War II, and a number of contemporary issues.
- International Affairs 46.521F1 or W1
  Theory and Practice of Arms Control
  This course explores the theoretical and analytical
  underpinnings of modern arms control with
  special emphasis on the impact of political,
  eco-nomic, technical and diplomatic factors. Topics
  include superpower negotiating strategies, multilateral arms control, nuclear proliferation and the potential contribution of confidence building
  measures, informal agreements, crisis control measures and third party initiatives to the arms control
  process.
- International Affairs 46.523F1 or W1 International Mediation and Conflict Resolution This seminar explores various approaches to the management and resolution of international economic, political and security conflicts. These approaches may include arbitration, conciliation and mediation as well as less formal mechanisms for third party consultation and collaborative problem solving. The course focuses on the theory and practice of international conflict resolution, using cases drawn from a variety of issues and settings.
- International Affairs 46.527F1 or W1 Conflict in the Middle East A critical examination of competing interpretations of conflicts in the Middle East region, including approaches to conflict resolution.
- International Affairs 46.529F1 or W1 Conflict in Southern Africa
   A critical examination of competing interpretations

of conflict in southern Africa, including approaches to conflict resolution.

- International Affairs 46.530F1 Political Economy of Multinational Enterprise This course is designed to give the student an appreciation of recent economic and political developments in the fields of international trade and investment as they relate to the operations of international enterprises. The course will develop concepts and analytical approaches and provide examples in order to examine the impact of international enterprises on international affairs.
- International Affairs 46.531W1 International Industries
  This course will develop a framework for des-cribing and analyzing international industries. A number of industries will be examined. Issues to be discussed will include producer country associations, codes of conduct and guidelines, concession agreements and expropriations, country risk analysis and international collective bargaining.
- International Affairs 46.532F1 or W1 Science, Technology and International Affairs: The Advanced, Industrial Countries This seminar analyzes the process of technological change since the industrial revolution and examines its consequences for development in the advanced industrial countries and for relations among these countries.
- Science, Technology and International Affairs: The Third World This seminar focuses upon the problem of building indigenous technological capabilities in the Third World. It examines the role of MNCs in the

International Affairs 46.533F1 or W1

ing indigenous technological capabilities in the Third World. It examines the role of MNCs in the transfer of technology, the generation of appro-priate technologies locally and the role of the state in the formulation of technology policy for development. Technological cooperation among Third World countries may also be discussed.

• International Affairs 46.534F1 or W1 Agribusiness North and South Analysis of the transformation of agriculture into an integrated multi-sectoral food production system and of its theoretical implications. Focus on the growth and strategies of agribusiness institutions in advanced industrial societies and their penetration into, and impact upon, Third World economies.

(Also offered as Geography 45.558)

• International Affairs 46.535F1 or W1 International Bargaining and Negotiation: Theory and Practice

An examination of bargaining and negotiation in international economic, political and security issue areas, emphasizing case studies as well as theoretical analysis.

- International Affairs 46.536F1 or W1 The Third World in the Global System The seminar examines the international relations of the Third World. It includes an analysis of relations within the Third World and with other segments of the global system. Topics may include human rights, leadership styles, and the role of ideology, and the global effects of industrialization, militarization, and war in the Third World.
- International Affairs 46.537W1 Macroeconomics in a Development Context An examination of macroeconomic theory and policy in the context of the developing countries, with special emphasis upon theory and policy for open economies, structural adjustment to international disequilibration, exchange rate and balance of payments management, fiscal and financial policy.
- International Affairs 46.538F1 International Economics: Policy and Theory An overview of international finance, trade, investment, and international aspects of economic dev-elopment. Emphasis will be placed on policy analysis and the underlying institutional context.
- International Affairs 46.539W1
  International Financial and Monetary
  Institutions and Policy
  A selective, in-depth review of issues such as balance of payments, adjustment processes, and the role of international financial and monetary institutions.
- International Affairs 46.540F1 or W1 Trade Policy Analysis

This course analyzes various international trade and trade-related investment policies using an international political economy approach. The course emphasizes theoretical and empirical techniques together with case studies. Topics include the comparison of alternative policy instruments to achieve national objectives; tariffs and non-tariff barriers to trade such as subsidies, quotas and trade-related investment measures; preferential trading arrangements; trade in services and trade-related intellectual property matters; exchange rate management; strategic trade policy; other policies related to competitiveness; and the role of interest groups in shaping trade policies.

Prerequisite: International Affairs 46.538 or equiv-

alent, M.A. standing in the Norman Paterson School of International Affairs or permission of the school.

• International Affairs 46.541F1 or W1 The International Economics and Politics of Resources

An examination of resource-related issues in the international system, focusing on energy, non-fuel mineral and agricultural areas.

• International Affairs 46.542F1 or W1 Territory and Territoriality
Evolution of the Western meaning of territory is examined against contrasting contemporary concepts in the Third World, especially Africa. Significance of territory and territoriality: their impact on restructuring of political space, territorial claims, self-determination, conflict and processes of development.

(Also offered as Geography 45.540)

- International Affairs 46.544F1 or W1
  The Environment for International Management
  Analysis of the international economic environment in which managers in the public and private sectors operate. The course examines the reasons for the growing interdependence of nations in terms of trade and investment, and the relationship of investment to trade in goods and services. Problems of management associated with this interdependence will be identi-fied, together with an examination of the nature and effectiveness of emerging international rules and standards.
- International Affairs 46.545F1 or W1 International Organizations in International Affairs

A critical analysis of the roles played by the United Nations and other international organizations in the field of international conflict, development, and political economy.

- International Affairs 46.546F1 or W1 Policy Analysis and Evaluation
  This seminar examines approaches to the development and implementation of the international public policies of a number of countries, including Canada, in a variety of issue areas. The seminar focuses on case studies of economic, political, and security policy, and includes a consideration of organizational and systemic constraints on policy making as well as various concepts and methods for the evaluation of policy.
- International Affairs 46.549F1, W1, S1 Selected Topics in International Affairs

- International Affairs 46.555F1 or W1 International Law: Theory and Practice This course is designed to give students an appreciation of various theoretical perspectives on international law, with a view to locating the role which international law plays in the international system. Topics considered include the basis of international law, the creation and sources of international law, the utilization of international law in international dispute-resolution, and international law and world order transformation. Illustrative issues will vary according to the interests of students each year. (Also offered as Law 51.563)
- International Affairs 46.557F1 or W1 International Economic Law: Regulation of Trade and Investment

A study of selected problems associated with the regulation of international economic activity. The seminars will focus on a discussion of relevant international institutions (GATT, UNCTAD, IMF, World Bank), an introduction to the legal aspects of integration (e.g. EEC, ASEAN), governmental regulation of trade and investment (e.g. FIRA), and the problems of extraterritoriality.

*Prerequisite:* Open only to graduate students in their master's year who have not previously studied international economic law. (Also offered as Law 51.520)

- International Affairs 46.560F1 or W1 Human Resource Development An analysis of theory and policy regarding some of the major areas of human development in the developing areas, including demography and population, education, public health, nutrition, women and development, social security, employment, and manpower planning.
- International Affairs 46.561F1 or W1 Historical Dimensions of Development and Underdevelopment Comparative studies in the economic and social history of selected developed and developing countries. The aim is to identify conditions which have fostered or inhibited development in the past, and thereby to assess contemporary development strategies in the light of historical experience.
- International Affairs 46.563F1 or W1 Issues in Development in Africa Analysis of structures and processes of political, social and economic change in intertropical Africa at scales ranging from that of the local community to those of the nation state and international system. Alternative development policies and practices in rural and urban areas (including regional planning

strategies) will be examined. (Also offered as Geography 45.520)

- International Affairs 46.564F1 or W1 Issues in Development in Latin America An examination of Latin America's principal developmental trends, problems and policies, as they have evolved during the past three decades. Emphasis will be given to the design and implementation of alternative development strategies through the remainder of the century.
- International Affairs 46.565F1 or W1 The Ethical Dimension of International Affairs This course critically examines the ethical dimensions of development, global conflict, and international political economy. Subject matter includes beliefs and values, rights and obligations, and individual and state morality.
- International Affairs 46.567F1 or W1 Issues in Development in Southeast Asia A comparative analysis of political and economic development in selected Southeast Asian countries, with particular attention to Indonesia, Malaysia, Thailand and Burma. Major issues to be studied include the process of political and social change, the emergence of contemporary economic systems, the evolution of development policies and planning and their impact on agriculture and rural development, education, industrialization and trade expansion.
- International Affairs 46.568F1 or W1 Indigenous Perspectives on Third World Development

This course examines some of the major perspectives and theories on Third World Development which have emerged from within the Third World. Included are authors representing structural, dependency and radical theories of development, as well as those who see development as psychological or spiritual liberation. Views of some of the leading political figures of the Third World are also considered.

• International Affairs 46.569F1 or W1 Social Cost-Benefit Analysis and Development Project Evaluation

An examination of social cost-benefit analysis and project evaluation in the context of the developing countries, emphasizing applied case studies as well as theoretical analysis.

• International Affairs 46.570F1 or W1
The Natural Ecosystem
An analysis of human involvement in the natural environment as an ecosystem in the development context. Material will discuss how the environ-

ment continues to be modified and the possible long term consequences in the light of rapid technological advances. Special attention will be given to individual development projects including their political and social setting.

 International Affairs 46.571F1 or W1 Global Environmental Change: Human Implications

The nature of contemporary changes in global environmental systems and their significance for society, the economy and international relations. Phenomena such as climatic warming, deforestation, and the environmental pressures of urban-ization and intensive agriculture are analyzed in terms of their regionally differentiated impacts and challenges for societal adaptation. (Also offered as Geography 45.505)

• International Affairs 46.580F1 or W1
Pacific Economic and Political Relationships
A course on the nature and prospects of the Pacific
basin economy. The main topics will include a review of the record of outward-oriented development
strategies of Japan, Korea, Taiwan, Hong Kong and
ASEAN; the economics and politics of U.S.-Japan
relations and the prospects of China's participation
in Pacific trade and development. Canada's economic and political

interests in Pacific co-operation will also be studied. Attention will be paid to the prospects for regional institutional arrangements as well as bilateral links.

- International Affairs 46.581F1 or W1 Regional Cooperation Among Developing Countries A comparative study of selected regional cooperation or integration schemes, including some or all of the East African Community, the Economic Community of West African States, Central American Common Market, CARICOM, the Andean Group, and the Association of South-east Asian Nations.
- International Affairs 46.582F1 or W1
  The Political Economy of East-West Relations
  Seminar designed to deepen students' understanding of the interaction of politics and economics in
  East-West relations. Topics include: the forms and impact of technology transfer, the role of multinationals, the problems of indebtedness, the effectiveness of controls and sanctions and the growth of energy interdependence.

  Special attention paid to Canada's position and experience in East-West relations.
- International Affairs 46.583F1 or W1 Political Economy of Eastern Europe An examination of the Soviet-East European economic, political, ideological and military relations,

of economic integration, of international relations in the region, and of the role of East-West cooperation.

• International Affairs 46.588F1 or W1 International Political Economy

A seminar on the changing international division of labor and its consequences for world politics. Topics include differing patterns of industrialization, colonial relations, the role of the state, and current issues in international political economy. *Prerequisite:* Work at a senior undergraduate level is required in at least two of the following: international relations, development studies, international trade, or political economy (or permission of the school).

*Note: Not open to students enrolled in 46.500.* (Also offered as Political Science 47.588)

- International Affairs 46.591F1, W1, S1 Tutorials in International Affairs
  To be chosen in consultation with the director.
- International Affairs 46.595F1, W1, S1 Research Workshop

This seminar focuses on the special problems of research design in the interdisciplinary field of international affairs, with materials drawn from both the established literature and the practice of leading members of the school's faculty.

- International Affairs 46.598F2, W2, S2 Research Essay
- International Affairs 46.599F4, W4, S4 M.A. Thesis

## **Selection of Courses**

In addition to the graduate courses offered in the school, qualified students may choose from among courses in international affairs offered by related departments, schools and institutes.