BMSTU in PEN-International

Alexander G. Stanevsky
PhD, professor and Director,
Center of Deafness at Bauman Moscow State Technical University

Changchun University, China
2009
By RF Presidential Edict # 64 of 24.01.1995 BMSTU was included into the national corpus of especially valuable objects of Russian heritage.

By President Medvedev’s Edict # 732 of 01.07.2009 BMSTU was granted the status of “a federal university having the right of independently establishing standards and requirements for the training programs delivered by it including those for the students with special needs”
BMSTU Today

- 18,000 undergraduate students  
  Full-time training
- 1,000 graduate students

over 60 majors in all areas of mechanical engineering, instrument making and information technology:

- Bachelors – in 26 areas of study
- Engineers – in 75 areas
- Masters – in 12 areas

- 19 departments including the Center for the Deaf

- Number of deaf students - 250  (+ 50 students of Pre-entry Department)
- Number of majors for the deaf - 11
- Number of students with special needs other than deaf – 300

Students with special needs study in the **mainstream**.
Training Programs for the Deaf at BMSTU

1934 - commencement of training the deaf; mainstream + sign language interpreting

1994 - Leading Training and Research Center for Vocational Rehabilitation of People with Special Needs (LTRC Department) set up at BMSTU (by Order of Russia’s State Committee on Education # 1139 of 25.11.1994):

- development and implementation of federal university-level standards for training and support programs;
- distribution of resources and funds;
- coordination of all university departments’ activities aimed at implementing training and rehabilitation programs for the deaf (TRP)
Center on Deafness at BMSTU

COORDINATING AND SUPPORTING ROLE OF THE CENTER FOR THE DEAF WITHIN THE UNIVERSITY

BAUMAN MOSCOW STATE TECHNICAL UNIVERSITY

DEPARTMENTS:
- RADIO-ELECTRONICS AND LASER TECHNOLOGY
- INFORMATICS AND CONTROL SYSTEMS
- ROBOTICS AND INTEGRATED AUTOMATION
- ENGINEERING BUSINESS AND MANAGEMENT
- MANUFACTURING ENGINEERING
- FUNDAMENTAL SCIENCES
- BIOMEDICAL ENGINEERING

CENTER FOR THE DEAF PROVIDES:

Services:
- SUPERVISING
- SIGN LANGUAGE INTERPRETING
- AUSIOLOGICAL MONITORING & PROSTHESIS
- SPEECH THERAPY
- TUTORING
- COUNSELING
- NOTETAKING
- PSYCHOLOGICAL MONITORING
- CONSULTING
- ADVISING
- TECHNICAL DEVICES SUPPORTING

Curricula

SPECIAL
- SPECIAL REHABILITATION AND EDUCATION COURSES

STANDARD

DEAF STUDENT

MULTIMEDIA LAB

SELF-INSTRUCTION LAB

AUDIOLOGICAL MONITORING ROOM

SPEECH CORRECTION ROOM

Preliminary courses

62 staff members;
80 faculty members
Dynamics of number of the deaf and HH students at BMSTU before PEN

Regions’ number - 29
Number of specialties - 9

Year | Students’ number
--- | ---
1994 r. | 30
1995 r. | 46
1996 r. | 60
1997 r. | 89
1998 r. | 129
1999 r. | 151
2000 r. | 154
2001 r. | 164
2002 r. | 168
Pre-PEN Infrastructure of Training and Rehabilitation Environment of the Center for the Deaf at BMSTU
Starting of PEN-International in Russia

June, 29, 2001
Rochester, USA -
Signing of «Protocol of intentions»
between:
• Rochester institute of technology, USA
• Tsukuba College of technology at TTU, Japan
• Tianjin University of Technology, China
• BMSTU, Russia

March, 25, 2002
BMSTU, Moscow – signing of «Memorandum of understanding» between BMSTU and NTID at RIT
BMSTU as a PEN-International Partner University

Import of technologies:

2002 – establishing Multimedia Laboratory 423 as a node of PEN-International at BMSTU, Moscow, Russia
Joint funding by PEN-International and BMSTU

2004 – setting up of Multimedia Classroom Complex based on wireless technologies
Joint funding involving PEN-International
Import of Knowledge: BMSTU’s Participation in Technology Symposia, Conferences and Schools Held by PEN-International
BMSTU as a PEN Partner: Premises for Setting up a Regional Network (Ripple Effect)

Two meetings of Russian Ministry of Education Collegium held at BMSTU dedicated to the establishing in Russia of a System of vocational training for people with special needs (15 May 2001 and 24 June 2003).

Organization of a contest among educational institutions throughout Russia (by Order of Russian Ministry of Education of 12.11.2003) for gaining a status of a federal pilot site for vocational training of people with special needs (inclusion, mainstream):

- 21 basic vocational training institutions;
- 14 postsecondary vocational training institutions;
- 7 universities: BMSTU; Vladimir State University (VSU); Novosibirsk State Technical University (NSTU); Chelyabinsk State University (ChSU); TISBI, Kazan; Russian State Pedagogical University, St. Petersburg; Krasnodar State University.

BMSTU granted the status of The Federal Leading Center for Training the Deaf (by Order of Russian Ministry of Education of 09.03.2004)
BMSTU as a PEN Partner: through Self-Sufficiency to Technology Transfer

Minister’s Order of 24.05.2004 to include articles on setting up infrastructure for training people with disabilities into dedicated federal education development programs:

– commencement of the federal funding of the selected pilot sites (BMSTU, NSTU, VSU, ChSU) for purchasing multimedia labs with configuration and methodological support developed at BMSTU. A total of 12 labs worth 30 million rubles have been delivered to Russian universities.
Self-Sufficiency: Development of Multimedia Labs at BMSTU

Total number of multimedia labs: 5
Total number of students’ workstations: 77
Average number of hours per week per lab according to schedule ~ 33
Total number of hours per week for teaching courses: 165
Average number of hours per week per lab for non-course activities: 24
Total number of hours per week for non-course activities: 120
Self-Sufficiency: Infrastructure of Training and Rehabilitation Environment
LYCEUM PROGRAMS AT REMEDIAL SCHOOLS FOR IN-DEPTH STUDY OF SUBJECT AREAS;

BMSTU’S OCCUPATIONAL BASE SCHOOLS;

RUSSIAN NATIONAL RESEARCH PROGRAMS AND ACADEMIC COMPETITIONS ORGANIZED BY BMSTU FOR ENROLEEES AND SCHOOL STUDENTS;

PRE-ENTRY COURSES: ONE- OR TWO-YEAR-LONG AND INTENSIVE MONTH-LONG;

CAREER GUIDANCE DOORS OPEN DAYS
BMSTU: Job Placement Programs

- Specialist-controlled industry adaptation practical training at field-specific enterprises (3rd to 5th years);

- Part-time major-related work at field-specific enterprises (4th to 6th years);

- Work on graduation projects at industrial enterprises;

- Specialist advising on graduation projects;

- Targeted advising and consulting;

- Gaining occupational training credits;
- Vacancies database and web-site
Information and Technology Transfer: Russian National Forums, Leadership Schools, International Conferences

One or two events per year
PEN-Russia Project

24 June 2005, Rochester, USA:
Declaration on Cooperation signed between
BMSTU, TISBI Academy of Management, Kazan,
VSU, NSTU, NTID (Rochester, USA)

- independent section in PEN-International budget

2006 – Memorandum of Understanding signed between
BMSTU, TISBI, VSU, NSTU, NTID

Regional network of university vocational training for the deaf as an element of the global network officially launched

2007 – PEN-Russia expansion: Chelyabinsk State University (ChSU) joins PEN-Russia
Videoconference communication system ensures both point-to-point connection and linkup of up to 16 points. **Over 10 videoconferences a year** with PEN-Russia and PEN-International partners.

~ 40 hours **Distance learning** technologies are used for instructional purposes per semester, including training programs for faculty and staff.
Technologies Export: Faculty and Staff Training and Retraining Programs

Federal, regional and university-based programs

2004 – federal project with Federal Agency for Education (76 hours) – 375 teachers from 5 Russian Federal districts (including NSTU, VSU, TISBI and ChSU) trained;

2006 – Regional Center for the Handicapped, Moscow – 72 hours, 40 persons.

2007 – National Education Project:

300 BMSTU faculty and 70 persons from Moscow Municipal Psychological and Pedagogical University (72 hours)

Yearly regional (Moscow) training courses in using IT and special-purpose instructional technologies for teachers of remedial schools under the aegis of BMSTU and educational establishments of basic and secondary vocational training (~30 persons per year; 36 hours)

Yearly training courses for university faculty development – up to 90 persons; 36 hours

Yearly training courses for parents ~ 125 persons; 6-hour program
Resolution of Moscow Government on the development of municipal system of specialized training for people with special needs based on the results obtained by BMSTU

Grant from the Government of Moscow for purchasing MML sets by schools for the deaf – 3; training centers – 1; college – 1; vocational school – 1; rehabilitation center for the handicapped – 12 (to the total amount of $500,000)
Online and Web-Resources for the Deaf at BMSTU

Web-site of BiGOR is on [http://bigor.bmstu.ru](http://bigor.bmstu.ru) (in Russian)

- Base and generator program of networked instructional resources for hearing-impaired students – [BIGIR](http://bigor.bmstu.ru) – serves as tools environment for faculty and tutors as well as a training courseware system for students;
- Electronic textbooks and course materials;
- Web portal;
- MSTU Center’s Website: [http://guimc.bmstu.ru](http://guimc.bmstu.ru)
Moscow Model of Providing Resources for Specialized Training and Rehabilitation Programs (TRP) in the Mainstream

- Long-term grant from the Government of Moscow for the development of a regional model of resources provision for specialized training and rehabilitation programs for the deaf in mainstream environment;
  - resources provision on per capita basis

1998 - Moscow Training and Methodological Center for Medico-Social and Vocational Rehabilitation of Deaf Students established by the Resolution of Moscow’s Government
Interuniversity International Collaboration: BMSTU – National Tsukuba University of Technology (NTUT), Japan

Reciprocal visits and information exchange;

Videoconferences;

Participation in All-Russian forum of hard-of-hearing students;

Joint poster with BMSTU displayed at 2008 Technology Symposium at NTID;

Five-year cooperative educational and research agreement signed in September, 2008.

It is the first of its kind among PEN partner institutions.
About 30 students graduate every year including ~11% of Bachelors and ~89% of specialist-engineers or Masters.
Our mission is to create high-performance systems and complexes providing people with special needs with equal opportunities in getting high-quality vocational education, which will ensure their competitive performance in labor market, their inclusion into productive life of the society and high quality of life. To this end we are relying on our excellence and inexhaustible belief in human powers, innovative high tech, our commitment and reliability.