

"Public-Private Partnership Involvement"

BRUNEI DARUSSALAM



Program identity

Location

Involving all 4 districts (Brunei & Muara, Tutong, Belait, emburong) in Brunei Darussalam 996 Secondary students

34 Secondary schools (all government schools, 7 Secondary private schools, 1 sports school, 2 Arabic secondary schools, 1 Technical school and 2 Vocational schools

Age Range: 13-24 Years Old

Program Duration: 20 weeks per Cycle

Key Responsible Organisation

- Entrepreneurship & Business Unit, Curriculum Development Department, Ministry of Education
- Universiti Brunei Darussalam
- Brunei Shell Petroleum Company Sdn. Bhd
- LiveWIRE Brunei

Selection of program

In line with the national aspirations to strengthen public-private partnership, The Ministry of Education oficially signed a Memorandum of Understanding in 2011 with Brunei Shell Petroleum Sdn. Bhd (BSP) and Universiti Brunei Darussalam (UBD) and established the Brunei Entrepreneurship Education Scheme (BEES) in 2012.

The Entrepreneurship and Business Unit, Curriculum Development Department, Ministry of Education has been mandated to run the BEES programme. The BEES programme is a signature programme designed for secondary, vocational and technical students. The Ministry of Education hopes to equip students to meet the challenges of the 21st century skills as well as enchancing student's personal attritubes.

The programme will enable students to:

- gain a practical, activity-based insight into economic and business life
- appreciate the role of business and enterprise in society
- discover how business develops teamwork, communication, and presentation skills as well as understanding that are directly relevant to Enterprise and Work.

Rationale and aim of the program

The aim of the program is to stimulate the development of entrepreneurial nature



Public-Private Partnership Involvement

and capability in students through education and learning.

The objective is to help students to develop the attitudes and skills for enterprise, personal success, lifelong learning and employability.

Mission

To inspire and equip students in Brunei Darussalam to learn and succeed through enterprise.

Intended Outcome

It is hoped that participating students will:

 Discover how businesses interact with investors, customers, employees and society in general. Gain a practical, activity-based insight into economic and business

Brunei Darussalam

Indonesia

 Appreciate the role of business and enterprise in our society;

life.

- 4. Discover how businesses interact with investors, customers, employees and society in general;
- 5. Develop teamwork, communication, and presentation skills;
- 6. Build a bridge between school and the business world; and
- Develop skills and understanding that are directly relevant to Enterprise and Work.

Thematic Fields

There were three distinct phases in the scheme:



Phase 1 - Start-up Phase (Week 1 - Week 5)

A group of 10-30 students formed a company (Figure 2.) which was registered with the secretariat of LiveWIRE Brunei. During this phase, all documents for registration had to be completed.

LiveWIRE Brunei had been designated as the centre for BEES as a "hive" to support the programme. The "BEE HIVE" provided teams with business networking opportunities to meet, discuss and brainstorm ideas with the LiveWIRE counselors and their school advisors.



Students gathering together to do their planning during visioning workshop.

Each company would need to present their business plan and pay insurance fee to protect their company. Once registered, each company would be given the BEES manual kit and business documents for trading.

Workshops and training were conducted for students and teachers by government and non-government agencies such as LiveWIRE Brunei, Universiti Brunei Darussalam, Employees Trust Fund, Ministry of Finance and Certified Financial Planners from various bank institutions. This was to ensure students, teachers and advisors/mentors were clear on their roles and responsibilities. These workshops included Visioning Workshop, Business Plan briefings, Innovative Competences workshops, and Manual Business Kit Training and Financial Literacy activities.

The targeted students went through a brainstorming process in terms of the business nature, cost and benefits, revenue and profit of proposed products. This resulted in an amazing and successful group business presentation to the secretariat.

The workshops and seminars conducted provided students with detailed and helpful information on how to improve their business ideas. An important factor learnt was that a business would not survive without patience and initiative played an important role in handling finances. Authentic learning was crucial in order to create innovative product. (See Photo)

Phase 2 - Trading Phase (Week 6 - Week 15)

Phase 2 is the trading phase of the BEES. Trading Phase was where students did all their business buying and selling. Companies conducted their business in their schools or on-line. Students were also given the opportunity to conduct their businesses in a real business setting together with 100 local Small Medium Enterprises (SMEs) in Brunei for three days. This gave the BEES students the feeling of a realistic business setting.

Companies faced various dificult situations whilst producing, buying and selling their products. From this project, the students learned to be creative in solving business problems and ways of gaining profit. Teachers and business advisors supported the students.



Students during Trading week - SME Promotion

PHASE 3 - Winding up / Liquidation phase (Week 16 - Week 20)

Phase 3 is the liquidation or Winding-Up. The company went into voluntary liquidation after a life of approximately 20 weeks. Each company needed to submit an overall report to the secretariat and pay dividends to shareholders, corporate tax 3% and Zakat tax of 2.5%.. This is a real hands-on experience, which is different from learning from a textbook.

BEES Convention

By the end of the trading phase, all students and teachers gathered to celebrate their achievements. Their decision to be a participant and a part of BEES was a courageous one indeed, as it involved venturing into new opportunities and their willingness to learn to take and accept risks. This decision to be an enterprising person was definitely a crucial and potentially life-changing point that should be celebrated.

The convention was not entirely to award winners, but rather to celebrate individual student's participations. Each company showcased their products and services to the public.

Six special awards were given to recognise the outstanding enterprising BEES companies, students who possess special skills, producing quality products and services, commendable ability and a high standard of business management performance.. The six awards were as follows:

- 1. Most Outstanding Company,
- 2. Most Profitable Company,
- 3. Most Outstanding Planner,

- 4. Most Innovative Product,
- 5. Most Entrepreneurial Company,
- 6. Most Competent Company.

TEACHER DEVELOPMENT

The training for teachers was mostly conducted by experts from Business Counselors, LiveWIRE Brunei. Manual Business Kit training and other related workshop were given to teacher advisor as well as for business external advisor.



His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah, the Sultan and Yang Di-Pertuan of Brunei Darussalam, in his titah (2014) stated that he recognised the Ministry of Education's efforts in strengthening business literacy, specifically on entrepreneurship through collaboration with other government agencies. This clearly shows the support from the Head of State.

SMEs play an important role in contributing to the future success of Brunei apart from fulfiling corporate social responsibilities from various bodies in the private sector such as Brunei Shell Petroleum Sdn. Bhd., LiveWIRE Brunei, business advisors from LiveWIRE Brunei Business Networks and local entrepreneurs.

The programme created a platform for interaction between all stakeholders, focusing on learning through observing real-life experiences by conducting businesses which provided students with the basic skills to succeed outside of the classrooms and raising the awareness that entrepreneurship is a career field that they could venture into.

CURRICULUM DEVELOPMENT

BEES aims to enhance students' knowledge and skills through authentic learning and activities. This enables Vocational and Technical students to relate to



Team building activity at Entrepreneurship Village, Universiti Brunei Darussalam

courses or skills taught in schools such as Agricultural science or interior design to earn by establishing an enterprise based on their skills.

For secondary students, BEES students had a real hands-on experience of practicing accounting skills, such as recording real transactions of their business and calculating income statements accounts in subjects such as Principles of Accounts. Students taking the Commercial Studies subject would understand better the purpose of using trade documents such as receipts, invoices, recording stocks and others as part of their business operations. Students taking Economics subjects experienced the real process of "division of labour". All of these created a better understanding on how businesses are carried out in the real

AGE GROUP INVOLVED

The BEES programmes were targeted at students 13 - 24 years of age. (E.g. In Photo 3)

BENEFICIARIES OF PROGRAM

The program was specifically intended for students and teachers from participating schools and generally, for the country as a whole.

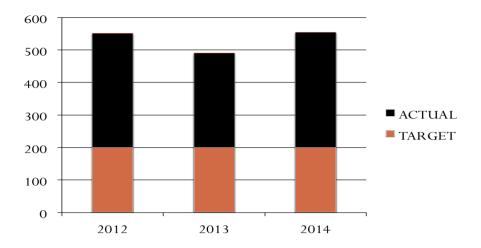
The program was intended for secondary students. It was also offered to students in vocational and technical institutions. Other stakeholder includes teachers and parents from participating schools.

SIZE OF PROGRAM

Since its first implementation in 2012, a total of 61 companies have been formed from all secondary school governments (Clusters 1-5), two middle Arabic school, one Sport School, seven private secondary schools and three Vocational/Technical Schools. The table below shows the products and services offered.

	PRODUCTS		SERVICES
1.	Production of poultry (chicken)	1.	Air-con servic- es
2.	Production of Talapia fish	2.	Mural painting services
	(breeding)	3.	Plumbing services
3.	Food & bever- ages	4.	Beauty and sa- loon services
4.	Selling plants	5.	Event man-
5.	Customised water bottle to promote		agement services
	"Green envi- ronment"	6.	Health fitness and futsal tournaments
6.	Selling hand- made	7.	Henna home services
7.	Customised bookmarks	8.	Photography services
		9.	Customised T-shirts" ser- vices
		10.	Tourism service - boat tour for tourist.

List of Products and Services



Target versus actual participation

Figure showing positive response for BEES programme (number of target versus actual participation from students).



His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah, the Sultan and Yang Di-Pertuan of Brunei Darussalam Speech as a Policy

- •Entrepreneurship is recognised as one of the national agenda of the country.
- •This is much in line with the country's national vision to prepare Brunei's young generation for future roles as capable, creative and thinking citizens aligned with The Brunei's National Education System in the 21st Century (SPN21).

Ministry of Education, National Committee on ASEM ME Innovative Competencies

- Public-private partnership commitment in support to initiate the driver.
- •This includes all stakeholders from parents, teachers, schools managers and schools community.

Schools and Institutions

Schools and

institutions are encouraged to involve and participate in entrepreneurs hip as to equip them with more experiential matters in managing entreprise in line with what they have learnt.

Global Enterprise Challenge (INTERNATIONAL LEVEL)

The Global Enterprise Challenge is a global competition, where students compete within a 12-hour timeframe. The GEC will run across three different time zones the Americas, Europe / Middle East / Africa and Asia / Pacific

Teams worked to create an idea, a prototype, a business plan, a video presentation and an optional Power Point/web presentation.

The work of each team was submitted via the internet to a panel of international judges, who looked for the winning combination of teamwork skills, an innovative approach and an outstanding standard of product, prototype, plan and presentation.

Outcome: The challenge was a test for student's creativity and innovation. Education is no longer about being buried in books, cramming for exams, worrying about grades. Education, in reality, is simply learning every day. These include learning how to communicate, working in a team or even simply learning how you learn best. This is the entrepreneurial skill that Brunei hopes to imbed in all students in SPN21.

Global Money Week (INTERNATIONAL LEVEL)

A total number of 120 students and 30 teachers were invited to attend a financial talk on Entrepreneurship and Financial Literacy Education, organised jointly by Employees Trust Fund, certified financial planner by various financial institutions and Ministry of Education Brunei.

Target Group: The BEES Students

Age Range: 13-24 years old.

Outcome: The students learned the importance of planning money before starting a business and to become a responsible citizen in managing their personal finances.

Global Money Week Video Making Competition

The top 5 schools presented a 5-7 minutes to 30 teachers and 120 students. The video-making competition topic was on

Key drivers



Brunei Global Money Week activities

financial literacy and entrepreneurship topics, presented in Bahasa Melayu. This video would be used to promote entrepreneurship and financial inclusion by banks.

Target Group: The BEES Students Age Range: 13-24 years old.

Outcome: The winner was given recognition and trophy. Overall marks for each team are combined together with Financial ExploRace Competition (40% in Video making and 60% in Financial ExploRace)

Global Money Week Financial ExploRace

This was a two-hour game, where students were tested on their knowledge of entrepreneurship and financial planning. They had to complete a series of games prepared by Employees Trust Fund members, some of them being physical and another four being mental games.

They had to run around from one area to another to play the games at Jubilee Recreational Park (one of Brunei's park) and solved basic financial puzzles, for example financial and entrepreneurship decisions and also a game of trust where the player tested their skills and understanding on investment, insurance and business related tasks.

The objectives of the games were to teach the students in addressing and resolving game-related questions as a team and at the same time exposing the students to financial and entrepreneurship issues. This was where the students learned about teamwork. Target Group: The BEES Students

Age Range: 13-24 years old.

Outcome: Global Money Week was celebrated with 118 other countries around the world. The winner was given recognition and an overall trophy. Overall marks for each team were combined together with Financial Video making competition and Financial ExploRace Competition (40% in Video making and 60% in Financial ExploRace). The Winners were awarded \$1500 in their savings account, \$1200 and \$800 respectively.

Success Weekend

Success Weekends were conducted for 3 hours and to 2 full days. It was a short workshop that used fun and engaging team activities to teach young people entrepreneurial skills. The workshop was intended to change the mindset of students to deal with challenges of all kinds, as well as to teach them effective communication techniques.

Target group: The BEES students

Age of students: 13 - 20 years old

Outcome: Teamwork, communication, thinking and presentation skills were developed as well as the skills and understanding directly related to the entrepreneurial and life skills.

Visioning workshop

It was a 2-day workshop designed to establish within their company a share of equal fundamental vision that acted as the key driver for the students to realise and accomplish. The Visioning workshop taught and gave exposure on developing their business idea, preparing a business plan, procedure in selection of the company organisational structure and producing the company action plan.

Target group: The BEES students

Age of students: 13–20 years old.

Outcome: Teamwork, communication, thinking and presentation skills were developed. Participants learned to responsible, enthusiastic, committed, energetic and effective



SME Promotion, BEES Companies receiving certificates of participation

Small and Medium Enterprise (SME) Promotion

The SME Promotion Weekend is a joint collaboration between LiveWIRE and The Oil & Gas Discovery Centre (OGDC). It aimed to provide real exposure and opportunities for participants to experience hands-on interaction with customer in a business. It was specifically designed for LiveWIRE participants who were already in business and those who were thinking about participating in a real life business buying and selling scenario. The BEES companies were sponsored by LiveWIRE Brunei to participate in this carnival.

The weekend carnival aimed to provide participants an opportunity to test the market demand for their business ideas, products or services on offer and to test their marketing and communication skills.

Target group: LiveWIRE participants, the BEES students, Brunei youths and the public.

Age of students: 13 – 60 years old

Outcome: Enterprises promoted and marketed their new and existing products or services to the public.

Uniqueness

- Tri-party collaboration
 - Government
 - Industry
 - o Business community
- Curriculum
 - o Enhance entrepreneurial skills
- Business simulation
 - o Authentic learning

Universal principle

- Framework can be used in any country setting their possesses economic priority objective
- Also applicable in government initiative in upgrading its education quality and employability (through skills and quality competencies)

How to use the case

- Reduces the gap between education and the business community
- Enhances the con idence in employability of the graduates/students
- Education business community partnerships
- Reduces unemployment
- Increases independency and reduces dependency to government? Jobs which are 'stagnantly scarce'

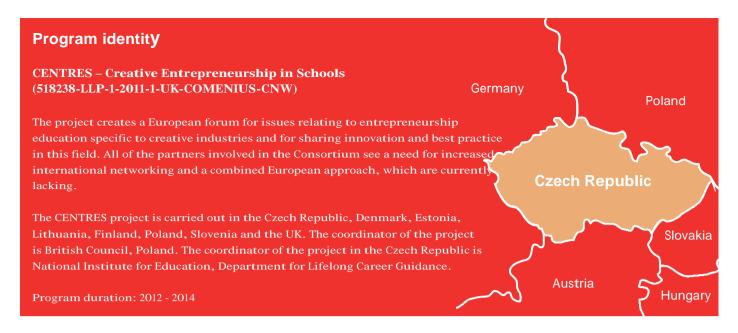
Other Issues

- Continuity vs. Sustainability
- Sponsorship
- Mindset
- Role Model
- Continuity vs. Sustainability
- Inducing Creativity & Innovation

"CENTRES – Creative Entrepreneurship in Schools"

CZECH REPUBLIC





Selection of program

(justification)

CENTRES - Creative **Entrepreneurship in Schools**

2012 - 2014

This program has been selected as it provides a unique combination of support for entrepreneurship education with an emphasis on Cultural and Creative Industries. As the pilot activity in the Czech Republic is led by the Department for Lifelong Career Guidance, the creativity and entrepreneurship are understood in a broader social context as a set of important skills for the successful transition to the labor market and as important career management skills. With this in mind, the pilot activity in the Czech Republic was focused on the e-learning training for career counsellors and teachers in schools. The e-learning program aimed to introduce the entrepreneurship education with emphasis on career management.

The pilot activity in the Czech Republic was introduced to 10 vocational schools in Central Bohemian region, located in the central part of the historical region of Bohemia. Its administrative center is placed in the Czech capital Prague, which is situated in the center of the region. The city is not, however, a part of it and creates a region of its own. The most important branches of industry in the region are mechanical engineering, chemical industry and food industry. Other significant industries are glass production, ceramics and printing. On the other hand, some traditional industries such as steel industry, leather manufacturing

CENTRES Creative Entrepreneurship in Schools





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and coal mining have been declining in the recent period. The region is also very specific due to its proximity to the capital, which means high rate of work mobility.

Thematic field

(methodological)

In the context of the Czech Republic, the program represents the first stage of introducing entrepreneurship education, support for teachers and career counselors in schools. The concept of entrepreneurship education with emphasis on career management skills (creativity, entrepreneurship, innovation) or the so-called "21st century skills" isn't well known among teachers and the importance of supporting entrepreneurship isn't still fully recognized among policy makers: based on the Recommendation of the European Parliament and Council on key competences for lifelong learning (2006), the Strategy for Lifelong Learning in the Czech Republic (2007) aims at the development of functional literacy and key competences such as financial literacy. Entrepreneurship is not, however, explicitly mentioned. This strategy was followed by the Strategy for Lifelong Learning Implementation Plan (approved in 2009), which supports curriculum reform with an emphasis on increasing functional literacy of students and the developing the key competences. This can, for example, be done by implementation of larger student projects, such as setting up training firms. National Institute of Education, a body of Ministry of Education, Youth and Sports, recognizes the importance of entrepreneurship education. It hosts the National Centre of training firms (also called practice or fictive firms), which provides methodological support for schools that decided to implement the program. However, since entrepreneurship education for all categories of education is quite a new concept in educational policy of the Czech Republic, the National Strategy of Entrepreneurship Education in the Czech Republic is still missing.

With this in mind, the pilot activity in the Czech Republic was focused on the e-learning training for career counsellors and teachers in schools. The e-learning program aimed to introduce entrepreneurship education with an emphasis on entrepreneurship and creativity as part of career management skills (CMS). CMS encompass all the competencies needed to manage one's own career: entrepreneurship, sense of initiative and creativity, self-management, opportunity awareness, flexibility, endurance, optimism, ability to take risks, teamwork and openness to learning.

E-learning program was designed based on the results of the focus group meeting with representatives of schools, entrepreneurs and local employers. 10 career counsellors from Central Bohemian



CENTRES

Skills for the Future

region successfully completed the study of the program in August 2013. The program was divided into 3 modules:

- a. Introduction to creativity and entrepreneurship education - aims to introduce career counsellors and teachers to the field of creative education and creative industries and to present the latest trends and projects dealing with these topics.
- b. Career guidance in schools as a creative process represents an added dimension to career guidance in primary and secondary schools. It is a process that can significantly affect the attitudes of students towards acquiring skills useful in life. Its aim is also to encourage guidance practitioners to think about how to develop and improve career education and turn their school into an innovative institution.
- c. Practice firm the practice firm is a subject bringing vocational element into an increasing number of non-economic school programs in the Czech Republic as well as other European countries. The module was designed for upper secondary school

teachers who want to help students prepare for real life.

Mentoring in schools – all 10 teachers were invited to incorporate the contents and methodologies gained through studying the e-learning program into their teaching methods within a cross-curricular subject "Man and Work". The core structure of the mentoring sessions in schools was the same for all 10 school:

<u>Introductory Session</u> – presentation of the program, baseline survey for students, introduction to creative entrepreneurship, discussions.

<u>Visit of an Entrepreneur</u> – every school had to invite at least one entrepreneur from creative or related sectors to their education program to present his/ her experiences with entrepreneurship, to discuss with students and to be their mentor in bringing their ideas into practice.

<u>Start Right Now!</u> – students shared their ideas, visions and learned about possibilities to start "right now" – information and contacts to grant agencies, youth programs supporting entrepreneurship among young people.

<u>Fictive firm</u> – presentation of the Fictive firm programme. Brainstorming on the content, subject, plan of their own fictive firm

<u>Final Session</u> – summary of the project, evaluation, end point survey for students.

Age group involved

The pilot activity in the Czech Republic was introduced to Secondary and Vocational students aged 15-19.

What makes this program rather unique is its specialization on Secondary and Vocational schools. We decided to do so, because there is a lack of entrepreneurial programs for this target group. From the Career Guidance point of view, entrepreneurship, creativity and innovativeness, are among the most important skills not only for "21st century" Entrepreneurs, but also for employers and active citizens.

Rationale and Aim

The European Union, as one of the biggest exporters of creative goods, recognizes the growth potential of the creative industries, particularly in relation to its innovation agenda: creative industries are acknowledged as "the most potentially innovative of all EU sectors and as critical drivers and disseminators of innovation, as well as an important provider of employment and a major player in regional growth" ref: Creative Graduates, Creative Futures, Ball et al 2010

Due to the decline in many traditional industrial sectors, such as manufacturing, an increasing number of countries in Europe are now looking to strengthen their industries and the creative economy is becoming a priority policy area for many European governments. However, there are a number education-related challenges facing CCIs as outlined below, which CENTRES seeks to address:

A lack of entrepreneurial skills within CCIs A lack of entrepreneurial educational programs that fit the needs of the CCIs sector A call for stronger partnerships between education institutions and CCIs

The need for a joint European approach

This ambitious multi-country project has been co-funded by the European Commission, the British Council and eight organizations across Europe in the Czech Republic (National Institute for Education), Denmark (The Danish Foundation for Entrepreneurship – Young Enterprise), Estonia (ENTRUM), Lithuania (Lietuvos Junior Achievement), Finland (The Aalto University

School of Business, The Small Business Center), Poland (The Polish Association of Creativity), Slovenia (CEED) and the UK (A New Direction).

The CENTRES project has two key aims:

- To promote models and a methodology that can be used by schools and other organizations providing entrepreneurship education to develop pupils' creativity and entrepreneurship skills.
- To promote ways to engage creative entrepreneurs and businesses productively with schools, as well as to engage school-age students in practical business opportunities in the creative industries.

Beneficiaries

- Educators: teachers, head teachers, organisations involved in entrepreneurship education and other learning providers in Europe
- Secondary and vocational school students in participating European countries
- Policy-makers and other stakeholders responsible for education policy and practice at European and national level e.g. Ministries of Education and



Culture, local education authorities, EU institution

 Stakeholders with an interest in entrepreneurship education and the CCIs from across Europe

Program size

The pilot activity in the Czech Republic involved 195 secondary and vocational school students and 14 teachers and career counselors.

Altogether, the CENTRES project so far involved:

- 720 teachers engaged in pilot activity in 7 European countries
- 2220 pupils engaged in pilot activity in 7 European countries
- 264 schools engaged in pilot activity in 7 European countries
- 130 Entrepreneurs.

Duration

The pilot activity in the Czech Republic took place from May 2013 till December 2013

The duration of the whole project: February 2012 – September 2014.

List of activities

(prioritised order)

- 1. Online Knowledge Bank
- 2. Policy Recommendations
- 3. International Conferences

- Policy workshops in individual partner countries
- 5. Pilot activities in individual partner countries

The list of all pilot activities held by partners of the project is to be found on CENTRES website:

http://centres-eu.org/centres-activities among the most important Career Management Skills.

CENTRES – pilot activity in the zech Republic

Reflexion on the case

Uniqueness

- Entrepreneurship Education with emphasis on CCIs
- The Career Guidance poitn of view

Universal principles

- Focus on supporting teachers and career counselors as the facilitators of learning
- Creativity and innovation delivering a competitive, resilient and high value economy
- Focus on the employability of young people by promoting the philodophy of life longlearning and lifelong career management

How to use the case

The case offers an example on how to introduce the philosophy of Career Management and with emphasis on entrepreneurship, creativity and innovativeness in the ducation context that haven't recognised the importance of these skills.

Other issues

Career Guidance and Education need to recognize the importance of entrepreneurship, creativity and innovation among the most important Career Management Skills.

"THE ENTREPRENEURSHIP SCHOOL" DENMARK



Program identity

Location

Municipality of Ikast-Brande Denmark – 40.000 inhabitants

- 13 elementary and lower secondary schools
- the youth counselling system coordinated with secondary and vocational schools in the region.

4000 students at the age of 6-16 years.

The program is governed by a Municipal Steering Committee with representatives from Business and Industry, The City Counsil; School Heads and School Counsils. They meet 3 times a year.

Program duration: 2008-2016

Head Contactperson/Secretariat Lisbeth Tarp Mouritsen



Selection of program

(justification)

The Entrepreneurship school 2008-016

This program has from Danish side been selected as it provides a very unique example (case) on how a Municipality is able to initiate a program, which offers every child an opportunity to try out his or her creative/innovative and entrepreneurial potentials. The Municipality of Ikast -Brande is located in the heart of the mainland Denmark (Jutland). The city is well known for being the center of the textile industry and has fostered some of the most successful international Danish companies (brands) in this field. The region in which the program is located has a strong and proven reputation for being of the most entrepreneurial areas of Denmark. The region has during the economic crises proved that in terms of employment and sustainable growth it has been able to overcome outsourcing of companies - decline of production lines and still be able to create new companies and workplaces.

The Municipality started this program in 2008 with 5 schools and in 2012 it was expanded into all 13 schools in the area. In 2011 the program was turned into a so-called "high priority focal point" for the Municipality's future development and the program is regarded as one of the 4 top policy priorities of the Municipality.



In 2010 the Municipality and the Chambers of commerce and industry founded the so-called "InnovaAward" (a prize award). This Award invites every year all schools and students at all ages into a competition on creating the most innovative programs which have proven impact on the local community in which it is implemented.

The program is planned to continue till 2016 in its existing format. Then it will be evaluated for improvement and extensions.

In the context of the ASEM ME program on Innovative Competences, this case offers a fully conceptualized program aimed at the primary school – It shows how creativity – innovation and entrepreneurship is triangled into a possibility for all children to build up an entrepreneurial attitude towards either their study life – there life as active employees - as future entrepreneurs and eventually as active citizens.



Thematic field (methodological)

The program can be regarded as having a 360 degree approach towards innovative competences. The program sets not limits on how the children can use their creativity.

However the most significant joint thematic is the "impact on community".

Activities and proposals made by the students have to prove an impact on oth-

ers then the students themselves. This means innovation and creativity must have a target outside the individual child or class. Moreover the program operates on a joint pedagogical model; The KII model.

All students and schools involved develop their ideas based on this specific work method (it is emphasised that the children are allowed to use other more complexe models, but as a minimum all projects has to be developed on the basis of this model.

The KII model consist of three different phases:

- The Creative Learning Space (Creativity)
 Where the children/youth have the opportunity to create new ideas and intervention. E.g using existing things, tools or materials in new ways or situation. Has an experimental characther
- The Innovative Learning Space (Innovation) Innovation is the critical selection of ideas and especially when they are able to involve/convince others and to involve others into the specific idea. They have to create targets and objectives for the created idea and be open also to leave the idea if it proves not to be feasible. Based on questions like
 - How can we mature the idea?
 - Who can benefit from the idea?
 - Critical selection and plan for how the idea can be developed into practice!
- The Entrepreneurial Learning Space (Implementation)

This is when the children/youth creates demonstration models and involve the potential users of the idea. This also includes how to communicate the idea towards users and to promote the idea towards investors or manufactures.

Beside this overarching Learning model it is emphasised by the model that it has to improve:

- a. Knowledge based competences of the students in the understanding of the model and the knowledge base behind it.
- b. Methodological/Process competences; The students shall have a clear understanding of the process on how creativity shall be turned from "storm of ideas" into something



usesfull for others then the student herself. The methodological understanding is how to be able to go from "an expressed need – through a "creation of ideas to handle the need" – and into a usefull (innovative) development of the idea and at the end into "social setting" where the idea has a meaning and usefulness for others"

c. To use the entrepreneurial process shall further develop the social competences of the students.

Primary thematic: Cooperation with Business and Industry

In the ASEM ME Context the program is foremost an example on how a school system (in this case a municipal/district school system) is able to create a long term cooperation with business and industry – where representatives from the Business and Industry plays an active role in the school activities.

Secondary thematic: Curriculum / methodological development
BBy using a joint methodological approach/didactic format towards the broad understanding of "entrepre¬neurship"

- the so-called KII Model(in English: Creativity – Innovation – Implementation)

- the model offers a wide range of examples and evident experience on how

children at the age of 6-16 are able to learn an entrepreneurial progression in working with projects.

Agegroup involved

The Entrepreneurship School is in terms of age targeted as a first priority at all children in the Primary School age 6-16 years. The Danish Primary School is divided into three main "levels"

- "in-schooling-level" age 6-9 years
- "the middle-level" age 10-13 and
- "out-schooling level" age 14-16 (lower secondary).

All levels are involved in the program.

What makes this program rather unique is that there is a formal coordination with:

- The secondary school system (gymnasium 16-19 years old) and (vocational school 16-19 years old). The formal coordination takes place through joint activities / events and meetings. E.g the joint program; "Waves around us"
- Active coordination with the Youth Counselling system where the participation in the Entrepreneurschool is regarded as a part of the counselling and tutoring of childres/youth when they have to make their choice of future study or vocational employment.

It is the assessment that the program has been able to place "entrepreneurial direction of life" as equal to e.g. academic studies or other vocational directions.

Rationale and aim of the program

The aim of the Program is to "develop a culture in the school; in the business life; in the civil society and in the family, that makes it possible to make the vision come true that our local community is the place where the learning of children and youth are build on a substantial understanding and use of innovation – creativity and entrepre—neurial aspirations."

Taken from the Project description of the program: 2013-14.

Beneficiaries of program

The citizens of the local community of Ikast-Brande Municipality are in broad terms the beneficiaries of the program.

It is a fundamental understanding of the program that the beneficiaries of the program are not only the children and youth/students of the schools. The program strongly emphasises that the program shall create ideas and activities "for the benefit and further development of the community; Business and Industry – Civil Society and Family life".

The program is defined as key indicator under the "Business and Industrial Industry – Civil Society and Family life".

The program is defined as key indicator under the "Business and Industrial Policy Paper" of the Municipality.

The program is defined as "a municipal. contribution to the "National Policy Plan for Entrepreneurial Growth".

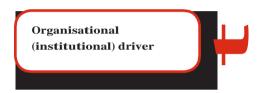
Size of Program

The program involves some 4000 children and youth. It is the assessment of the program that all classes at the 13 schools are involved in activities at some stage in the program implementation process.

Drivers







The Mayor of the City has made this program to one of four top priority program for the Community, whic have created a very strong commitment from all parties to take part and to motivate children and youth.

The key driver from a learning perspective is that only initiatives which clearly can justify a clear use and needs for other then the children involved, can be promoted. Commitment to the public good is a learning driver.

The political committment has enforced priority on this program, which again has matured the development of strong team of school managers and teachers to develop methodology and theory about the program. The organisational/institutional driver is the creation of knowledge community around the program

Duration

TThe program started as a Pilot-program in 2008 involving 5 schools.

In 2011 the program was extended to cover all 13 schools (public and private) in the Municipality.

From 2013 to 2016 the program has earned position as a one of 4 major priorities of the Municipal development policy.

The program will be fully evaluated by external evaluators in 2016.

List of activities (prioritised order)

The Program releases 4 times a year a Newsletter together with a special volume on the occasion of the InnovaAward. These newsletters reveals a wide range of activities perform at the school. In this list of activities we will present 5 specific activities:

(Name of activity/Short inTarget group/ Age of Students/Outcome).

Name of Activity: Smartphone and tablets Program for Elderly
Short introduction: A 10 grade class has developed a smart phone introduction and training program for all elderly persons in the local community. The youngsters have developed a training material specially aimed at people +65 – this comes with at training program, which the youngsters carry out in elderly clubs and elderly centers.

 $Target\,group: Elderly\,in\,the\,municipality.$

Age of Students: 15-16 years of age

Outcome: Ensure that old people get access to the internet and social media

Name of Activity: Immigrant workers

-" The good story" – A movie about
how the Danes better understand
immigrant workers

Short introduction: The program was made by a group of 7 grade youngsters and created short stories about immigrant workers in Denmark to be used on the side of job-centers and social departments. The main purpose was

to create a tool to be used to prevent rumors, that all immigrant workers have criminal intentions. The program is uploaded to a Youtube video and also broadcasted on regional television.

Target group: The local community.

Age of Students: 13-14.

Outcome: Create awareness and prevent conflicts.

Name of Activity: School Introduction Video

Short introduction: A group of grade 3 students, has produced an introduction video for children starting in school. The video is used on site of kindergardens and to parents to children starting at school. The video introduction can be used with or without involvement of the class who has produced it.

Target group: children in kindergardens.

Age of Students: 10.

Outcome: Give children and their parents an understanding of the school from the child perspective.

Name of Activity: FashionShows for children and youth

Short introduction: In association with the textile industry a group of youngsters in 8 grade, has carried out a full fashion show – planning, design, communication and press, promotion and entertainment, invitation of designers and accommodation of the show. Scope; Working as a event-management company.

Target group: Youthin the local Community

Age of Students: 13-14

Outcome: Finding new ways of fashionshows

Name of Activity: CAMP 2010

Short introduction: The CAMP 2010 was joint activity for all 7 graders at the 13 schools. The camp was organised as a 24 hour event where a number of companies had formulated certain task and challenges in their business development. Proposals was developed by the youngsters and handed over to company owners after the camp.

Target group: Companies in the local community.

The Entrepreneurship School

Uniaueness

Long tradion in the community to forster entrepreneurs - part of the local culture

The Program fits perfectly into the reform process of the Danish Primary school

Universal principles

Positive and committed cooperation between policy makers and business sector is crucial to ensure priority on innovation

The Program Mission; All activities shall prove their necessity and solve needs for other then the students

Building a group of dedicated teachers and school managers to anchor it into the daily life of the schools

Reflections on the case

How to use the case

The case offers an instructive example on how much decision makers can support a learning program for the community

The program offers an example on how seed money together with will and trust can play a decisive role of the success of a program

Other Issues

Patience and time is a necessary factor to mature and develop principles and methods which can enhance sustainable results for innovation and entrepreneurship



"COMPANY PROGRAM"

HUNGARY



Program identity

Location

Primary, secondary and VET schools in Hungary

- more than 500 schools involved:
- students at the age of 6 to 18;
- the company program is designed to be flexible and easy to expand with additional elements according to the needs of the partner schools;

The program is coordinated by the Junior Achievement Hungary, the licensed franchisee of Junior Achievement Worldwide, a non-profit organization (JAM).

Program duration: from 1993 continuously

Executive Director: Ms. Orsolya Gergely

Head of Advisory Board: Mr. Tamás Kürti (deputy director of Kürt Co.)



Selection of program

(justification)

Since its launch in 1919, Company Program students around the world have had hands-on experiences that develop new skills such as teamwork, leadership, presenting, planning and financial control as they learn to take responsibility for the success of their company. It's the perfect preparation for working life!

The JAM believes that in the near future basic financial skills will be indispensable for children to become successful, independent and responsible adults. Therefore the goal of the JAM, it's partners, experts and colleagues is to deliver the required financial knowledge to the next generation as a tool which empowers them to accomplish their dreams.

In the Company Program students learn how to take a business idea from concept to reality. They form their own real enterprise and discover first-hand how a company functions. They elect a board of directors from amongst their peers, raise share capital, and market and finance a product or service of their own choice. At the end of the program they present a report and accounts to their shareholders.

The JA-YE Company Program is recognized by the European Commission Enterprise Directorate General as a 'Best Practice in Entrepreneurship Education'.

Thematic field

(methodological)

Establishing a mini-company (CP) is based on the principle of learning by doing. During the school year, students will use what they learn in school in a practical way and gain experience from running a business. It might be hard work, and they need to seek the knowledge they need in various ways.

The Company Program gives students the opportunity to prepare for their working life through the experience of running their own company over the course of one academic year.

As a result of running a JA-YE Company, the students gain

- an understanding of how a business works and how wealth and employment are created
- the ability to work in a team
- improved communication skills
- more enthusiasm and self confidence
- a willingness to take responsibility and initiative
- time management skills
- experience of key business functions such as marketing, financial management, sales, customer care and personnel management
- We know that the probability of establishing your own business later in life is 50% higher as it would have been if they had not participated.
- The CP is therefore a unique opportunity if they have a dream of creating something themselves in the future.

 Through the CP they will see the connection between what they are working on at school and how business works. In addition, studies show that students who have been involved in the CP have better self-esteem, better ability to make decisions and are better to cooperate.

Learning outcomes

Students can develop enterprising skills, attitudes and behaviors, including:

- Creative thinking and problem solving
- Communication and presentation skills
- Confidence and a can-do attitude
- Teamwork and leadership
- · Negotiation and decision making
- Setting goals and time management
- Managing risk.

Curricular or thematic relevance Standalone enterprise activity or could be linked to: Business Studies; Economics; Citizenship; PSHE; Careers Education.

How to organize

The elements of the Program can be used within timetabled lessons or in other contexts such as suspended timetable events or extra-curricular time.

Volunteer involvement

The program is supported by volunteer advisers from the business world who are on hand to guide and mentor the companies. The teacher's role is to organise the running of the program, arrange resources as required, support and follow up the project with the class.



As a student, one will gain enterprising skills, attitudes and behaviors including:

- Creative thinking and problem solving
- Communication and presentation skills
- Confidence and a can-do attitude
- Teamwork and leadership
- · Negotiation and decision making
- Setting goals and time management
- Managing risk

Students will learn how to

- Raise real finance by selling shares
- Open and use their own company bank account
- Carry out market research
- Work together to create their business plan
- Develop their own product or service
- Market and promote their product or service
- Trade with the public
- Manage the company finances
- Take part in trade fairs

Compete with other schools in company of the year competitions.

Age group involved

The target groups of the Company Program are students aged 6-18 in different school

types:

- Primary school age 6-14 years (ISCED 1, 2);
- Grammar school age 10/12/14-18 years (ISCED 3A);
- Secondary vocational school age 14-18 (ISCED 3A);
- Vocational school age 14-18 years (ISCED 2/3C);

All school types are involved in the program.

Rationale and aim of the program

The aim of the JA-YE Company Program is to enable students to form their own real enterprise and discover at first-hand how a company functions. They elect a board of directors from amongst their peers, raise share capital, and market and finance a product or service of their own choice.

At the end of the program they present a report and accounts to their shareholders.

Students learn to:

- Raise real finance by selling shares
- Open and use their own company bank account

- Carry out market research
- Work together to create their business plan
- Develop their own product or service
- Market and promote their product or service
- Trade with the public
- · Manage the company finances
- Take part in trade fairs
- •

Compete with other schools in 'company of the year' competitions.

Beneficiaries of program

The citizens of Hungary and the companies are in broad terms the beneficiaries of this program, but it is also important to mention that the program enables teachers to inspire even less active students to be involved in various activities.

The focus of this Program are on the children and their family. It strenghten the self-knowledge of the students and prepare them for their working life through the experience of running their own company.

The modules help to ensure that every child, regardless of their background or circumstance, has the support they



need to make a positive contribution and achieve economic well-being. By allowing children to experience the key principles of enterprise and employability in a relaxed atmosphere, we are contributing whole heartedly to this aim. The programme helps to increase pupils' understanding of the workplace and life beyond their immediate classroom environment.

Size of Program

The network of partner schools of Junior Achievement Hungary involves more than 600 schools in which there are hundreds of teachers properly trained to be a mentor in the student company program. The number of student companies varies from year to year depending on the teacher's activities or the student's motivation.

Drivers

Policy (strategic driver)

Several successful enterprise founded the Company Program and provides its stable background. The high number of involved schools shows that the committed and well prepared teachers are willing to convince the directors to join the Company Program.

Educational (learning) driver

The key driver from a learning perspective is the learning by doing approach. The elements of the program are adjusted to the needs of the different age groups (and classes) after a consultation with the representatives of the schools.

Organizational (institutional) driver

The innovative, opened perspective of the JAM team is supported by a group of committed experts, they together developed and reconciled from time to time the elements of the methodology. The Advisory Board guarantee that the Program reflects the needs of the business sector.

Duration

The Program started in 1993. Since that more and more school joined the program which run during the course of an academic year.

List of activities

(prioritised order)

The Company Program - Step by Step
The companies can range from as small
a number as 3-4 up to 12-15 students The
companies register via the JA-YE organization and are assigned an organization
number / registration certificate.

Over the course of one year they plan, design and sell a product or service:

- raise real finance by selling shares
- open and use your own company bank account
- work together to create their business plan
- develop your own product or service
- market and promote your product or service
- trade with the public
- manage the company finances

the beginning of the program.

- take part in trade fairs and competitions
- The Board Meetings can be held once per week. Session times need to be agreed at



Areas of implementation:

Across multiple subjects

- Science, Technology, Engineering, and Mathematics
- Language, arts and history
- Extra-curricular activities
- Music, visual art, health
- Partnership with community

Along this model there are several other core programs of Junior Achievement Hungary that can be realized during the implementation of the process:

Job shadowing: offers students a unique opportunity – a visit to a professional work environment and insights into how to find and keep a fulfilling career. It is recommended for high school students. Students participating in the program will acquire and apply the skills needed in demanding and ever-changing workplaces. Students will be able to recognize career clusters and potential job positions; understand the importance of researching the requirements needed to earn a position; and develop job-hunting tools, such as networking, resumes, and interviewing skills.

With the help of this program the students fulfilling various roles within their company have the opportunity to see a professional working in the specific position.

Company visits: students can visit different workplaces, factories, companies, ofices where the learn about the general set up, management and operations of companies, and gain insight into their everyday business operations

Business Today for Everyone program: at these events business volunteers pay a visit to classrooms and have an informal discussion with the students about building a career, labour market, preparation for the labour market and working environment in real business world.

Events during the school year: During the academic year JA Hungary organizes the annual national Christmas fair and Easter fair in Budapest, however there are several regional fairs where the students can also sell their products. These events are very popular among the young entrepreneurs owing to the fact that at these events they have the chance to sell their products and show them to a wider public because they are organized in frequently visited shopping centers. At the end of the school year there is a national company of the year competition for the secondary school students.

There are four stages of the competition:

- Company Report
- Stage Presentation an oral presentation before an audience
- Interview at a Company Exhibition Stand-a trade fair exhibition settings
- Panel Interview with the Judges

The team winning the Best Company of the Year award is honored to represent Hungary at the European Company of the Year Competition.

The Company Program

Uniqueness

Flexible program that can be adjusted to the needs of different age groups

Easy to complement the core element according to the potential of educational establishments

Universal principles

Positive and committed cooperation between the management, the teachers of the participating schools and the business sector is very important to ensure the development of flexible, student-centered, but entreprepays or ientated, methods

expending the group of dedicated teachers chool principles to widen the number of involved schools.

Reflections on the case

How to use the case

The case shows how enterprises can bring entrepreneurship skills into classrooms.

It also shows what kind of elements can the core program be expanded with.

Other Issues

Teacher's training is extreamly important as they are the ones who convince the principles of the educational establishments to join the program

Also they will be the ones to deliver the knowledge to students through the several types of activities.

"CAREER ORIENTATED NON-FORMAL EDUCATION FOR CHILDREN AND YOUTH"

LATVIA



Program identity The programme is implemented in Latvia: in 832 geeral education institutions, 48 hobby (interest) education institutions. Duration: unlimited Programme involves children and youth from the age of 7 till 19 The implementation of the programme is co-ordinated by National Centre of Education subordinate to Ministry of Education and Science, but the implementation is carried out by municipal education institutions. Latvia

Programme Rationale

In Career orientated non-formal education (CONE) children and youth according to their interests and individual educational needs learn and develop their abilities and talents in practical ways; improve their personality, socialize and acquire life skills necessary for their career. Involvement in CONE is voluntary and it allows learners to try themselves in different areas, recognize one's strengths and weaknesses, self-realize, ascertain if their interests are consistent, critically assess the accomplished, develop and be successful. The pupil can attend several clubs of CONE.

Children and youth in Latvia are offered varied CONE opportunities: in cultural education, sports, technical creativity, creative industries, environmental education etc. and all of them are inclusive of learning skills for career management. Such skills as time planning, self-organization and self-discipline, group/ team work, problem solving and decision making, communication and co-operation, entrepreneurship skills, tolerance, responsibility, adaptation to new situations are important for anybody's career; by career understanding focused activity to develop and express one's competences during whole life. All programmes offer opportunities for creative self-realization and development of identity that strengthen adequate self-esteem and motivation to be involved in a specific area for long-term. When interests and skills



become stronger the learner can achieve great mastery in the chosen area and it may influence the choice of his/ her profession.

However the person's future career may develop and his/her professional life moves forward the characteristics cultivated from early age and acquired career management skills will play a role in employment and quality of life. The local community, society and the county will benefit from it. That is why state and municipalities take care that together with formal education children and youth could acquire new experience and additional education which is interesting and important to them and that they can try activities relevant to different professions and master the first professional competences.

Thematic area

Poland

1. Professional development skills of pedagogues

Belarus

For the implementation of CONE essential is professionalism of the pedagogue, his/ her charisma, personal interest in individual approach. CONE is implemented by qualified pedagogues who take into account interests of the learners, stability of these interests, they develop skills step by step and motivate to continue the commenced if they see pupil's special abilities and talents. Very often the pedagogue becomes a confidante, role models, mentor because the setting of CONE is more informal, more open, psychologically more favourable and friendlier in comparison to lessons at school. The pedagogues should manage to combine theory/knowledge the pupils have acquired in formal education to practical, interactive activities of CONE.

CONE pedagogues systematically participate in seminars and courses of professional development, they develop their own methodological materials, recommendations, learning materials, promote good practice (also in e-Twinning environment).

2. Development of CONE The offer of CONE becomes

more state-of-the-art, it takes into consideration interests and needs of children and youth (e.g. the most popular activities at present are playing the guitar, contemporary dance, learning new technologies of handicraft – felting,



beading, origami, silk painting, ceramics, glassblowing, woodwork and metalwork, modelling and sewing, computer design, programming, animation, technical modelling). Appropriate technical base is created (e.g. looms and furnaces are purchased, recording studios and workshops with appropriate equipment are set up etc).

In many CONE programmes innovative approach is used to join several areas like environment and culture, culture and technical creativity, environment and study of local history, etc. Activities are also held outside; such as camps, workshops, outings, expeditions, excursions to enterprises, plants, visits to workshops of artists, artisans etc.

In near future the areas of CONE which are connected to important sectors of economy like nature and engineering, technical creativity, creative industries should be developed.

Children and youth who are in risk groups of school dropouts participating in CONE can become an opportunity

to stay in education because according to their interests they can acquire practical and social skills that are useful in life. Thus, it is possible to attract those children and young people who are insecure and unsure of themselves, socially passive.

3. Creation of co-operation network

While implementing CONE co-operation among Ministry of Education and Science, National Centre for Education, different municipal institutions, educational institutions, NGOs, professionals is very important. Ideally together with CONE pedagogues the general education teachers, class teachers, support staff: social pedagogues, education psychologists, career consultants, youth specialists, as well as families are involved in the cooperation network. It is very important to inform and educate children and young people, their parents about the offers and possibilities for participation in CONE in school or in CONE institution. It is essential to promote examples of good practice, when wellknown and popular among youth personalities inform about their participation in CONE during their school years and about its benefits.

Aims and objectives

To involve and motivate as many children and young people in CONE as possible to develop their personality, to refine their interests, abilities and talents, to promote socialization and develop life skills necessary for their career.

While developing learners' interest about learning traditions and cultural heritage and attitude about critical societal values, strengthen national identity and national consciousness, promote civic participation.

Benefits

About 80% of children and young people regardless of their nationality, gender, place of residence, social status, special needs participate in CONE.

They acquire new knowledge, skills and abilities, and they create a positive attitude towards themselves, society, work, nature, cultural values and the state.

The objectives named in the documents of policy planning documents of Latvia are purposefully implemented:

- in the National Development Plan 2020 for the objective of the development of competencies the determined course of action is: "While providing qualitative basic and secondary education for children and young people, as well as access to classes and activities outside formal education,



to diminish the proportion of children and young people with poor key competences, at the same time increasing proportion of learners who show highest levels of competences".

- in the document of education planning "Guidelines of Education Development for 2014-2020" one of the courses of action is "Expanding possibilities for children and young people outside formal education" identifying objectives: to motivate participation of children and young people in CONE; to create support system for the development of learners' talents; to strengthen learners' civic consciousness, civic participation skills, state and national identity; to promote acquisition of the cultural heritage, creation of new cultural values etc.

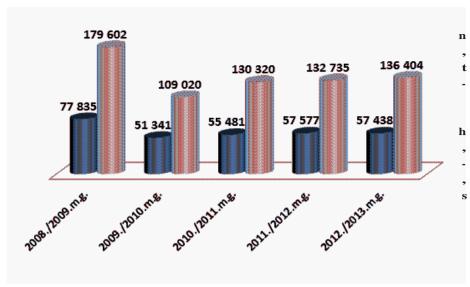
By using CONE family ties are strengthened because brothers and sisters participate in CONE, parents attend the events organized by school or CONE institution, they support and are interested in the development and achievements of their children.

Scope and duration of implementation

CONE is a part of educational system in Latvia. It has old and strong traditions, its uniqueness and achievements are valued internationally.

Although the statistics for the last five years show the decrease of the number of children, the interest about CONE gradually increase.

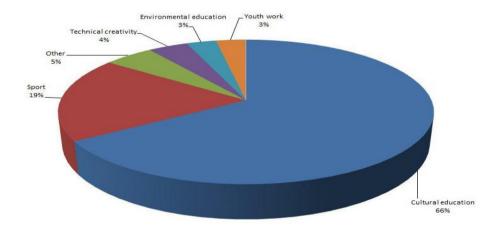
(The indicators for school year 2009/ 2010 were influenced by the economic crisis showing the importance of national funding).



CONE institutions General education institutions

Activities

Varied CONE is offered to children and young people in Latvia.



- Programmes of culture education (dance, music, visual and visually plastic arts, theatre, folklore).
- Programmes of creative industries (design, video, photography, computer design, animation, journalism, radio/TV workshops, audio/video recording studios, etc).
- Programmes of technical creativity (slot racing, aircraft modelling, ship modelling, design, robotics, electronics, computer training and programming, etc).
- Programmes of environmental education (naturalists, ecology, archaeology, palaeontology, astronomy, geology, gardening, etc).

Example 1

Learners of culture education programmes participate in the biggest cultural event for pupils - Latvian Youth Song and Dance Celebration that takes place once in five years. The participation in Song and Dance Celebration is very important in formation of learners' national identity and state awareness, in the inheritance of cultural values. 10th Latvian Youth Song and Dance Celebration will take place in 2015 and about 130 000 children and young people are getting ready for them (199 742 learners started school in school year 2013/2014). The aim is to achieve that each learner during the years of schooling has attended at least one of the events of celebration activities: rallies, festivals, exhibitions, competitions, shows, contests.

Example 2

Every year in the project of environmental education – the environmental game contest "Get to know the environment!" learners create games according to the specific theme which are evaluated and the best are promoted and with the help of sponsors multiplied for common use. Every year learners develop about 100 such games that are different in content and form and introduce them to their peers. Up to now the games are developed for the following themes: "Energy", "Protected natural habitats in Latvia", "Baltic Sea", "Forest"and others.

Example 3

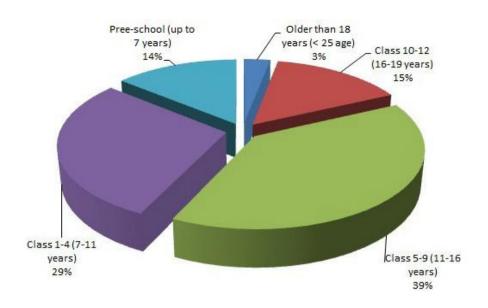
For the last two years National Centre for Education has developed successful cooperation with Latvian Electrical Engineering and Electronics Industry Association (LEtERA) for promotion of the electronics industry among children and youth. Several educational seminars and professional development courses "Basics for CONE electronics clubs" for teachers of physics and mathematics were organized with the support of LEtERA. The association helped to prepare methodological material and provided financial support for start-up electronics clubs and material improvement. For the development of CONE co-operation with professional associations should be promoted to draw interest of youth to technical sciences and fields.

Example 4

In one of the many visual and visually plastic art programmes related to costume design, sewing, style and fashion trends, learners create costumes using traditional techniques as well as creatively and innovatively use alternative materials. Learners themselves demonstrate their creations assessing their own and peer achievements.

Age

Children and youth from the age of 3 till 25 are involved in CONE. The biggest proportion of children who participate in CONE are from primary and lower secondary level. It is important that in one CONE pupils form different age groups can participate thus exchanging experience, enriching each other using method "peer to peer" or learners from senior classes teaching younger ones.



Pupils of CONE exchange their experience in different events: competitions, contests, exhibitions, rallies, festivals. These events take place on different level: educational institution, local, regional, national.

Driving force

- Preservation of traditions and cultural heritage, belonging to family, place of birth, native land
- 2. Socialization
- Aspect of inclusion (involvement of children and youth from minorities, with special needs, from social risk groups). Consolidation of society and integration/inclusion of children and youth of different nationalities and special needs in cultural and public life of Latvia.

Resources

The wages of CONE pedagogues are partially covered by state budget. In 2014 state budget allotted 10 587 115 EUR for this purpose.

The municipalities provide facilities and additional financing as much as possible for pedagogue salaries. The municipalities may determine parental co-financing which differs and is used for purchase of specific materials and instruments.

Evaluation

While assessing implementation of youth policy in Latvia and performing international evaluation "Youth Policy in Latvia" in 2008 experts from European Commission in their recommendations acknowledged that "improved version of out of school education of Latvia should be promoted across Euope as best example of practical solutions"



"Entreprenuership in Malaysia Education System"



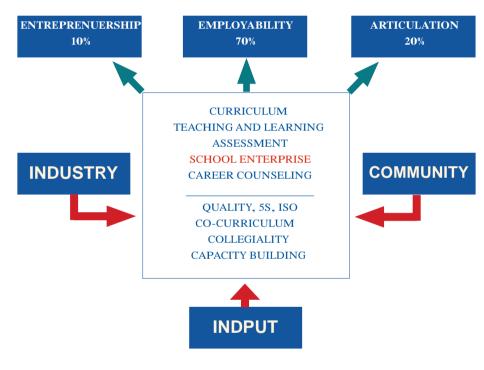


The Malaysia Vocational Education System

Malaysian Vocational Education System is currently undergoing a transformation that focuses in producing students who are competent in the vocational skills, professionally capable and marketable and highly sought by the industries. The transformation is dedicated to ensure that vocational education in Malaysia is at par with the mainstream education. The achievement of this plan will produce a strong and competitive workforce capable to contribute to the development of the country thus achieving the vision of becoming a high income nation by 2020.

The vocational education system is instigated by human recourses who are responsive towards government's various initiatives and its collaboration with industries to innovate teaching and learning capable in producing skilled manpower and entrepreneurs, Under the present vocational education transformation, Entrepreneurship contributes 10% of the Vocational College Framework. Students are expected to be engaged in curricular activities that suits the need of the market. Students are exposed to real life work skills and participate in the preparation and packing, advertising and marketing of the products. The implementation these activities in vocational schools are known as School Enterprise. Students learn about planning, and putting their plan to work and they are allowed to experience profit and loss from their work.

Vocational College Framework

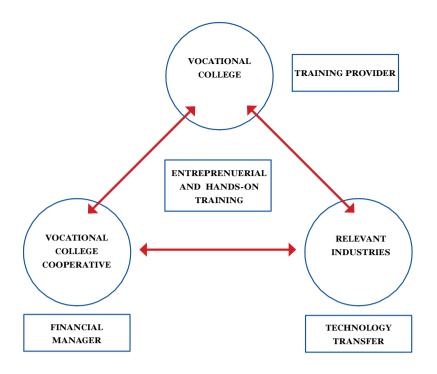


There are three main component of School Enterprise. They are Vocational College as the training provider, Vocational College Cooperative acts as the Financial Manager and the relevant Industries from private institution outside the school as a media for the transfer of technology.

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Interaction and Functions of Three Main Components of SE in Malaysia Government Vocational Colleges

This three partied arrangements makes School Enterprise as a training ground for students to be in contact to the outside world. Students get the authentic training from their teachers. The training is suited to the curriculum. In normal circumstances, the industry's input help gear the training to be suited to the need of the industry. When the industry places the order, students will get their chance to experience the real life situation in the production line in preparing the products and getting them ready to be packed and marketed. The college cooperative acts as the financial manager in providing a start-up capital. The profits from the

activity will be channeled to the college cooperative for benefit of the college at large.

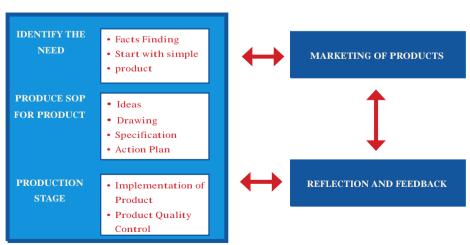
School Enterprise initiatives start from Identifying the Needs - Facts Finding. With sufficient information, problems or need statement will be laid out. The next stage will be Produce SOP for the Product. At this stage, Ideas are drawn into Specifications and sinthesized into Action Plan. The next level will be the Production Stage. At this stage Implementation of Product Product Quality Control is executed. While the product is being prepared, reflections on the processes are well looked through to

ensure the products made are according to the quality and specifications. The last stage is the Marketing the Products. The whole process is vise-versa as any feedback from any stage will be considered and handeled to ensure quality and satisfaction of the customer.



Relationship Between Authentic Training and SE in Malaysia Government Vocational Colleges

Vocational College - School Enterprise for Innovation and Creativity



MALAYSIA CASE STUDY 1: SCHOOL ENTERPRISE

BEST PRACTICES (UNIQUENESS)

- Authentic Training
- Pragmatic Based Programme
- 3 Partite Arrangement (Institution, Business, Industry)
- Focus on Hands-on and Employability Skills

MALAYSIA CASE STUDY 1: PRODUCTION BASED EDUCATION

PROMOTION OF CASE (POSITIVE ATTENTION) FOR MAINSTREAMING OF CASE

- Meeting Industry Needs
- Perception Change of Vocational Education
- Customized Training of Industry Workers
- Blue Ocean Strategy
- Cost Effective Programme by Government and Industry

UNIVERSAL PRINCIPLES

- Authentic Training
 Methodology
- Pragmatic Based Programme
- Smart Partnership with Business and Industry
- Focus on Hands-on and Employability Skills

OTHER RELEVANT ISUES OF THE CASE

- Continuous Improvement of Curriculum
- Teachers development
- Potential High Income

Fashion and Dressmaking, Culinary Arts and Cosmetology

Competitions

Community Service

Sawing Dresses for Orphans

Sawing Dresses for Kidzania

Charity Hi-Tea and Fashion Show



In the last festive season, students and teachers of Dress Making Department of College ERT Setapak Kuala Lumpur help sew clothes for an orphanage in Malacca Malaysia. The materials were donated by a department store in Kuala Lumpur. Once the clothes were ready, they were handed to the orphanage. This arrangement is less profit making, but it was a charity. More than that, it was an opportunity for the Dress Making Department students to sew the clothes.

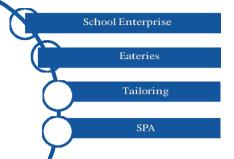
In this Fashion and Dress Making, Culinary Arts and Cosmetology is a multy partied coalition between Fashion and Dress Making Department, Culinary Arts Department and Cosmetology



Department. The three departments combined their expertice and effort to deal with a few local dress department, and primary school children. In this arrangement, Fashion and Dress Making Department students from College ERT Setapak Kuala Lumpur had the experience of planning, sawing of different fashions and design and the cat-walk. A number of primary school children from the neighbourhood is invited to display some children's clothes prepared by the students.

Students from the Cosmetology Department helps in preparing the models ready for the fashion show. Students from the Culinary Arts Department were in charge of preparing the food for the High Tea. During this High Tea and Feshion Show, a few of local clothes making store owner and fashion designer departments were invited. A few clothes were being ordered and sold.

Eateries, Tailoring and SPA



In this cateries Tailoring and SPA School Enterprise by College Vocational Dato' Undang Haji Muhamad Sharip, Three shop lots allocated just outside the college compound are put to use. College Vocational Dato' Undang Haji Muhamad Sharip is located in a small district Rembau in Negeri Sembilan, about 100 km from Kuala Lumpur. The three shop lots built by the local council are rented by the college cooperative. The first shop lot is converted into a boutique and tailoring department and the third shop lot is converted to a SPA.

Students and teachers from the Culinary Arts Department manage the café. They take turns in preparing the food for breakfast, lunch and afternoon tea. The café is open from 8.00 am to 5.00 pm every school day. Teachers, local community, and some visitors are patrons of the café. The profit they make will be put

in their college cooperative and recorded everyday.

Butik Cahaya Pesona is situated at the centre lot. It has a range of readymade clothes and scarves sawn by the students and some are bought from a supplier. The boutique is run by the teachers and students from the Dress Making Department of the college. Just like the café, the teachers and students take turns to run the boutique and tailoring shop. Teachers and government oficers come to the boutique to place orders for their clothes. The profit from the sale and tailoring activities is managed by college cooperative.

D'Creative Saloon is a saloon and a SPA. It is at the third lot. Teachers and students from the Cosmetology Technology Department operate this saloon. It offers services such as hair cut, facial, foot and body massage, make-up services, manicure and pedicure. It operates on school days from 9.00 am to 5.00 pm. Like the café and boutique, the financial management of the saloon is run by the school cooperative of the college.





"INNOVATIVE COMPETENCES" NORWAY

Work Exchange/Work Experience for teachers and trainers in Vocational Education and Training (VET)





Program identity

Location

Norway

The program is implemented in all 19 counties in Norway

Key Responsible Organisation

The Norwegian Directorate for Education and Training

Contact

The Norwegian Directorate for Education and Training Post@utdanningsdirektoratet.no

Selection of program

This program is chosen as an example of how the links between education and enterprises, both public and private, can be emphasised and developed in ways that strengthen both parties. The initial pilot scheme (six counties) was found to be of high quality and to result in innovative learning (FAFO 2012), and the program was as of 2013 therefore implemented in all of the 19 Norwegian counties.

The basis for this program is a White Paper no. 20 to the Norwegian Parliament in 2013 called On the right track-Quality and Diversity in Norwegian Education and Training. Teachers and trainers/instructors are the most important prerequisite for students' and apprentices' learning. High quality in education and training therefore requires qualified and motivated teachers and trainers. The main purpose of the program is to enhance the professional knowledge and experience of both teachers within vocational programs and instructors and trainers in the enterprises, and thereby to improve the overall quality of vocational education and training. Furthermore, the program aims to strengthen the collaboration between schools and working life, and to enhance the coherence between the school-based and enterprise-based learning for students and apprentices. The Work Experience Project also has proved to increase the number of apprenticeships, which is a very positive "side-effect" of the program.

Another follow-up of the white paper is the Norwegian Alliance for Apprenticeships, the so-called "Social Partner Contract". For the first time, the Government, employers' and employee organizations have agreed on a common, binding "Social partner contract" for apprenticeships. Thus, this tripartite agreement commits

all parties to work to increase the number of new apprenticeships by another 20% by 2015 compared to 2011 numbers. The Work Experience Project is a very important measure to fulfill this goal.



Thematic field

Teachers' and trainers' competence may be developed in different ways and in different learning contexts, including through different forms of training provided outside their regular work arena the schools. Some training measures result in formal qualifications, others do not. In working life, learning is most often informal, as part of everyday learning in and from professional work. Work Exchange is a planned form of informal learning, in which teachers and trainers take part of professional work in contexts others than their own, in order to obtain experience relevant for their regular work.

To be involved in and actually carry out professional work is the key to learning in the Work Experience Project.

Finland

Agegroup involved

Norway

Teachers and trainers in Upper secondary education and training (VET programs).

Rationale and Aim of the Program

The main purpose of "the Work Exchange/ Work Experience for teachers in VET program" is to enhance the professional knowledge and experience of both teachers within vocational programs and instructors and trainers in enterprises. The project aims to strengthen the collaboration between schools and working life, and to enhance the coherence between the school-based and the enterprise-based parts of the education and training. By doing so, the project aims to improve the overall quality in VET, and subsequently, and most important of all, to increase the students' learning outcomes.

Beneficiaries of program

Beneficiaries are teachers in VET schools (teaching either program subjects or general subjects), VET advisers, and supervisors and enterprise leaders/instructors involved in the enterprise-based training. Additional stakeholders are social partners, county authorities and external research communities, all represented in the reference group appointed by the National Council for VET (SRY).



Size of Program

This is a national program, and it is carried out in all of the 19 Norwegian counties. The pilot scheme included approximately 150 participants from six counties. In 2013-2014 a total of 660 teachers/supervisors/trainers completed the work exchange program, representing 100 VET schools and 130 enterprises.

Duration

The program started in 2010 (pilot); continued as a full scale, national programme in 2013, and will receive grants until 2015. From 2016 onwards, the program is intended to become a permanent scheme funded by already existing continuing professional development (CPD) grants.

List of activities

The main activity is the actual work exchange, in which the participants enter a new professional arena. Enterprises gain knowledge about curricula in VET schools, and VET teachers gain knowledge about practice and knowledge requirements in the working life. The work exchange period is to take up a minimum of five

days. For teachers in vocational programs the normal duration is between five and twenty days. Within the other categories of teachers/supervisors/instructors the normal duration is shorter.

Additional activities:

- forums for sharing experiences both for teachers in VET schools and trainers in work-based training
- use the new experience to develop local plans with learning outcomes, containing both educational content and teaching methods and approaches.

Up until the end of the program period, the Directorate for Education and Training arranges regular joint meetings and seminars gathering both participants and stakeholders.

Sources/funding

Pilot scheme 2010-2012 grants: 4.5 million NOK (counties) 1 million NOK (research-based evaluation; FAFO)

The full scale program grants: A total of 26.5 million NOK: 2013: 12.5 million NOK 2014: 10 million NOK 2015: 4 million NOK.

Assessment/Evaluation

The program was evaluated in 2012 by the FAFO Institute for Labour and Social Research by the use of mixed methods multiple case study design (individual interviews and survey). The results indicate that VET staff during the program, developed their professional competence. This concerns both those that chose a familiar area of expertise and those that chose a new area of expertise. They gained an increased understanding of professional practice and of work-based vocational training. Some VET teachers reported to have rediscovered their "professional selves" during the program. The work place instructors reported to gain a better understanding of the VET students and of the learning context in VET schools. The evaluation also revealed that the Work Experience Project has proved to increase the number of apprenticeships. This is of particular importance, since lack of apprenticeships has been a severe problem in Norwegian VET for several years, and may be a significant factor behind the high dropout rates in Norwegian upper secondary education and training.

Available materials

How to get more information on this case: In Norwegian:

http://www.udir.no/Utvikling/ Hospiteringsordning-skolearbeidsliv/

Key drivers in the program

Policy

Strategical driver: White Paper no. 20 (2012-2013) to the Parliament (Storting), agreement between social partners and national educational authorities (tripartite cooperation) on increasing the number of apprenticeships (Social Partner Contract).

Educational

Learning driver: The work exchange program leads to common understanding and trust between schools and apprentices/enterprises. This leads to increased learning outcome for the VET students.

Organisational

Institutional driver: The program is managed and developed by local authorities (counties) in close cooperation with schools and enterprises. The program is supported and monitored by national authorities.

Uniqueness

- The Work Exchange makes the teaching and training more relevant for the learners
- Increases the understanding, both in VET and in enterprise/workplace, of the learners' situation
- · Increases quality in the VET

Universal principle

- Evaluation (from pilot)
- The program meets the needs in enterprises and in school, both for teachers and trainers
- The program can lead to reduced drop out in VET

Reflecting best practice in the case Norway Case 1: Work Exchange/Work Experience for Teachers in VET

How to use the case

- The principles and methods are transferable
- Close cooperation between school and enterprise/workplace
- Other Issues
- Stakeholders are involved in the development of the program
- Involves Social Partners



Program identity

Location

Norway

The project is implemented in 6 different counties in Norway through the regional JA-YE Norway regional ofices. Each regional ofice includes local businesses that are relevant for the project.

Lower secondary program, 9th grade, age 12-13.

The total number of students involved is 900 from 10 different schools in Norway. All teachers responsible for the subjects involved are part of the program and participate in the teacher training course made for the program in each region.

Key Responsible Organisation

The project is in cooperation between EA-Young Entrepreneurship Norway, Ministry of Climate and Environment and Ministry of Children, Equality and Social inclusion and Ministry of Education and Research.

Program duration: 2009-2014

Contact

Cathrine Jansen,

Head of Education Department,

Junior Achievement - Young Enterprise Norway

www.ue.no



Selection of the program

(justification)

In a White Paper nr. 7 to the Norwegian Parliament (2008-2009), the Government proposed measures to make education and training more realistic, relevant and practical to the learners to ensure a population which is flexible and well-qualified for working life. Strengthening a culture for entrepreneurship and collaboration between education and training and working life was emphasised as essential measures to achieve this. A national strategy for entrepreneurship in education and training, "See the Opportunities and Make them Work" 2004 – 2008 was implemented and based on this strategy an Action Plan for 2009-2014 was developed. The Action Plan was

developed in cooperation with Ministry of Education and Research, Ministry of Trade and Industry and Ministry of Local Government and Regional Development. The definition of entrepreneurship in education and training is based on the definition the Government used in the above mentioned White Paper:"An Innovative and Sustainable Norway: Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities, whether in a social, cultural or economic context".

purposes:

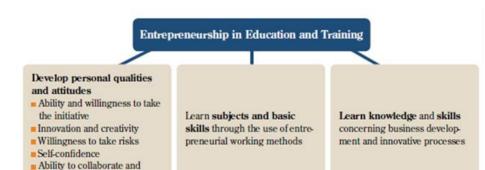
From the Action Plan 2009-2014: Main

Thematic field

The program is a cross-curricular promoting different and new ways of working and learning for both teachers and students. The program can be adapted to all levels of Education and Training from primary through Upper Secondary Education. However, what is presented as a case study is the lower secondary program, 9th grade, age 12-13. The program sets no limits on how the children can use their creativity.

Teachers included in the program are gathered in a teacher training course in which the focus is how to use entrepreneurial programs to give students a better understanding of their own consumption and each individual's ability to contribute to sustainable development through reduced consumption and increased recycling. The program aims to a change of mindset and attitudes.

The program is based on the formal learning outcomes in the national curricula for Norwegian schools and is deeply rooted in each schools local schedule for content and activities. The program is cross curricular and includes subjects like Mother tongue, Science, Social science and Food and health.



social skills

Rationale and Aim of the Program

The program was initiated by the Ministry of Climate and Environment with the purpose of disseminating knowledge to young people about the climate challenges we are facing today and in the future, and to encourage young people's curiosity and their desire to contribute through innovative thinking and action in the future. Specific aims:

- Be aware of the focus of the program's approach: putting students in a situation where they have to be creative, innovative and take action
- A more relevant and practical learning process by combining academic knowledge and "learning by doing".
- To promote cooperation between public and private sector wanting to invest in schools and education for young people.
- The events organised in the project give the students the opportunity to present their ideas to a jury that are interested and takes them seriously.
- To develop the JA-YE organisation that can assist the schools when implementing the program and organise the events connected to the program.

Beneficiaries of Program

The target group of the program is students in lower Secondary Schools. Other stakeholders involved are local businesses, public and private, dealing with sorting ofgarbage or other businesses which are eficient and good in recycling waste products. Some of the schools have also involved artists and different representa-



tives from crafts and trades that inspire the students to make interesting new products from garbage.

The program stimulates students creativity, the ability to cooperate, the ability to organize and divide work, and not at least – the innovation camp could strengthen the courage to learn through experimentation and to make mistakes. The students get greater awareness on how to collect information and increased awareness and competencies of different presentation techniques.

The program can give the school better opportunities to carry out the intentions of the national curriculum and to promote itself to society. The program is

also an example on how to link entrepreneurial work and methods with society by working with real tasks and professional participants from local business.

Not only the students and schools have benefits of the program; local enterprises help to put issues from working life on the agenda and also give the opportunity to promote themselves to future workforce. In this program the enterprises shows responsibility for the community and they involve themselves in creative processes which can give inspiration to their own development.

The main activities of the program components:



- An academic introduction to the topic in the project. The ministries involved have made a paper giving necessary information and links to digital learning materials the students can use (this is not yet translated into English).
- 2. The Ministry of Climate and Environment provides a lecture presented by an "Environment Agent" to the schools involved.
- 3. A two days Innovation Camp where students use creativity and ability to find sustainable solutions to a challenge given to them by an enterprise

the project. The financial support is NOK $100\,000$ to each region and NOK $150\,000$ to the JA-YE Norway of ice.

The main funding in this project comes from the ministries. There is also some local funding from the local businesses. However, that is small amounts covering smaller expenses connected to the activities.

Assessment / Evaluation

So far no external evaluation has been

teachers involve themselves into creative processes which can give the school inspiration to own development, this is both for the school as a whole and the individual teacher.

Learning driver:

The key driver from a learning perspective in this specific program is to find solutions to environmental challenges, important for the students themselves, the school and the community.

Organisational/Institutional drivers:
The most important organisational driver



Uniqueness

- Cross curricular promote the learners understanding on how different subjects can be tools in problem solving Could be adapted to all levels of
- education and training Versatile

Universal principle

- Sustainable development as entrepreneurship training
- Training for the 21st century's skills development of the learners creativity, innovation skills and to take action
 - Developing the students responsibility

Reflecting best practice in the case Norway Case 2: Green and Genious

How to use the case

The principles and the working method of the program is transferable to different projects, subjects and countries

Other Issues

- Cooperation between ministries, Young entrepreneurship Norway and local communities and enterprises
- Could be of importance to regional and local development - both education authorities, schools, enterprises and society





Teacher Education for the 21st Century (TE21)





Teacher quality is one of the most, if not the most significant factor for student learning, achievement and educational improvement. The preparation and continual development of teachers are imperative to achieving high standards of teacher quality. In light of the changing needs of Singapore's education system and developments in the global educational landscape, the National Institute of Education completed an institute-wide Programme Review and Enhancement in 2009. TE21 was the subsequent result of this Programme Review and Enhancement. TE21 is the model that currently guides the design, delivery and evaluation of NIE's programmes to provide the best education to pre-service and in-service teachers, in order for them to become 21st century teaching professionals.

The National Institute of Education (NIE) is the premier teacher education institute in Singapore since 1950. In 2014, the initial teacher preparation programmes cater to 1462 student teachers for the Postgraduate Diploma in Education, 1845 student teachers for the Bachelor of Arts (Education) / Bachelor of Science (Education) and 876 student teachers for the Diploma in Education.

Selection of Programme

The 21st Century is characterised by a rapidly changing, knowledge-based economy and an increasingly diverse and complex world. In this new landscape, education has to be structured to meet current needs while anticipating emerging trends for students in the 21st century world. The TE21 model is a response to the



educational challenges brought forth by the current global landscape as well as anticipated future needs. Teacher education has to be transformative in order to produce quality teachers equipped with the values, knowledge and skills to raise a new generation of 21st century learners.

Rationale and Aim of the Programme

The rationale of the programme lies in the belief that 21st century learners require 21st century teachers, and hence a new teacher education model was required to equip both beginning and serving teachers with the values and competencies that would impact teaching and learning in schools

TE21 is essentially a value-based teacher education that develops autonomous thinking teachers. NIE's 'thinking teacher' model is about thinking in context and it involves the elements of skilful teaching, reflective teaching and innovative teaching.

Programme Components

Development of Values, Skills and Knowledge (V3SK) underpinning philosophy

NIE's initial teacher preparation programmes are strongly pivoted on a central pillar of values (V), with skills (S) and knowledge (K) expected of a 21st century teacher wrapped around it. The V3SK framework crystallises NIE's unique paradigm of value-based teacher

education. It guides the design, delivery, and enhancement of NIE's programmes and courses, and aims to develop teachers with requisite values, skills, and knowledge necessary to function in the 21st century classroom. This framework is premised along three value paradigms. They are:

- · Learner-centred values
- · Teacher identity values
- Values of service to the profession and the community

Strengthening the theory-practice nexus through reflective practicum model and enhanced practicum

In NIE, the theory-practice link is strengthened by ensuring that "learning in practice" happens when pre-service teachers are in the university. Academic staff do this by using authentic classroom materials such as copies of student work, videotapes of classroom lessons, or authentic problem-based scenarios of classroom issues. Furthermore, coursework is integrated with practicums to reinforce and reflect key ideas to help pre-service teachers build a deeper understanding of teaching and learning.

Extended pedagogical repertoire

There is an extended pedagogical repertoire used in NIE's curriculum to equip the teachers with the range of instructional strategies needed for classroom teaching. This includes the use of self-directed learning, inquiry-based learning, real-world learning and information and communications technology.

Development of Graduand Teacher Competencies (GTC) framework

GTC is a set of professional standards, benchmarks and goals for the NIE graduands. The competencies focus on three performance dimensions – professional practice, leadership and management, and personal effectiveness. As with the V3SK model, NIE undertakes to build the capacity of pre-service teachers in these competencies during the course of their study, or plant the seeds of awareness in areas that will be further developed with experience as in-service teachers.

Introduction of e-Portfolio to help students build their conceptual map for learning and teaching

There are two components to this e-Portfolio initiative. Firstly, the e-Portfolio course serves as the cognitive framework

Attributes of the 21st Century Teaching Professional

V2 - Teacher Profession and Centred Values Identity Community Aims for high standards Empathy Enquiring nature · Belief that all children and practice Quest for learning Developing can learn · Building · Commitment to · Strive to improve apprenticeship and **Education Professionals** Passion mentorship nurturing the potential Adaptive & resilient in each child · Social responsibility & engagement · Valuing of diversity - Ethical Stewardship Professionalism KNOWLEDGE SKILLS · Reflective skills & thinking · Self dispositions Pupil Pedagogical skills Community People management skills · Subject content · Self-management skills Pedagogy Educational foundation & policies Administrative & management skills · Communication skills Curriculum · Facilitative skills Multicultural literacy Technological skills Global awareness · Innovation & entrepreneurship skills · Environmental awareness Social & emotional intelligence

V3SK Model

Performance Dimensions	Core Competencies
Professional Practice	1. Nurturing the whole child 2. Providing quality learning of child 3. Providing quality learning of child in CCA 4. Cultivating Knowledge: i. with subject mastery ii. with reflective thinking iii. with analytic thinking iv. with initiative v. with creative teaching vi. with a future focus
Leadership & Management	 5. Winning Hearts and Minds i. Understanding the Environment ii. Developing Others 6. Working with Others i. Partnering Parents ii. Working in Teams
Personal Effectiveness	7. Knowing Self and Others i. Tuning into self ii. Exercising personal Integrity and legal responsibilities iii. Understanding and respecting others iv. Resilience and adaptability

Graduand Teacher Competencies

that allows the pre-service teacher to form connections between the various modules undertaken at NIE. This process of forming connections will serve to synthesise and aggregate the learning, and strengthen the theory-practice connection. Secondly, with the structure provided by the e-Portfolio, pre-service teachers will be able to construct their conceptual framework of the coursework in NIE. The e-Portfolio serves to prepare them for their teaching practice, and help them conduct inquiry

into their own practice with a focus on the Theory-Practice Nexus.

Strengthen teacher personhood through Meranti and Group Endeavours in Service Learning (GESL)

Meranti is a project where pre-service teachers tune into themselves and their blind spots. Through this experience, they learn about how to take the perspective of those who are different from them through reflections, deep dialogue and sharing with facilitators, experienced teachers, and peers. They learn more about the roles of teachers, and the impact teachers can have on their students. They learn more about themselves and what shape their beliefs. They also learn to accept themselves better and to respect and accept others better, and to anticipate their future roles in helping their own students learn and deal with issues concerning diversity.

In addition, NIE seeks to develop teachers who will lead, care, and inspire our youth, and forge trusting partnerships with the community for the growth and well-being of their students. Group Endeavours in Service Learning (GESL) is a community outreach and engagement programme. It gives our pre-service teachers the opportunity to serve and learn from the community. All pre-service teachers of NIE's initial teacher preparation programmes facilitated by an academic facilitator will work on a local service-learning project in groups of 20 within their first year of teacher education.

Changes in physical infrastructure NIE has also embarked on creating teaching facilities that supports the use of innovative pedagogies while still allowing space for more traditional types of instruction. With more schools redesigning their classrooms to ensure conducive learning environment for students, these facilities within NIE enable teachers to experience a stimulated environment to inform their practice once they transit to schools.

Beneficiaries of Programme

The pre-service teachers enrolled in NIE's initial teacher programmes are the primary beneficiaries of the TE21 model.

Resources

No specific budget was allocated for this as TE21 is part of an institution-wide programme review and enhancement process.



Collaborative Classrooms

Shared vision

 Shared vision – A shared vision ensures that all stakeholders understand and share NIE's mission of developing thinking teachers, subscribe to the paradigm of value-based teacher education and have a common language among themselves.

Consistent underpinning philosophy

 There is a set of underpinning philosophy that permeates the design and delivery of curriculum and programmes with the focus on values, skills and knowledge needed for the future.

Clear expectations and goals

 Clear expectations and goals are set out for beneficiaries and stakeholders. For the beneficiaries, these expectations and goals provide clarity on the essential pre-requisite attitudes, skills and knowledge of the 21st century teacher. For the stakeholders, they promote solidarity of intentions and efforts in the preparation of our teachers.

Strong leadership

 Leaders are guided by their strong vision of NIE being an institute of distinction, excelling in teacher education and educational research.

Strong NIE-MOE-School tripartite relationship

 The robust partnership between NIE, MOE and schools is a key driver of NIE's internationally recognised teacher education programmes.

Drivers

Sources

The resources for the initial teacher programmes come from the Ministry of Education, Singapore.

Assessment/Evaluation

The assessment/evaluation of the programmes includes the establishment of an Ofice of Academic Quality Management on 1 July 2009 which administers surveys such as the Stakeholder Survey and the Graduate Preparedness Survey to assess the quality of teaching and learning at strategic points of the teacher development process, and to track the impact of our implementation efforts. In addition, research studies are conducted to evaluate the various aspects of TE21 initiatives.

Available Materials

More information on TE21 can be found at the following websites:

- TE21 Implementation Report NIE's journey from concept to realisation (http://www.nie.edu.sg/files/booklet_web.pdf)
- TE21: A Teacher Education Model for the 21st Century (http://www. nie.edu.sg/files/TE21%20online%20 version%20-%20updated.pdf)
- TE21 Executive Summary (http:// www.nie.edu.sg/files/TE21_ Executive%20Summary_14052010%20 -%20updated.pdf)

best practice

Uniqueness

- Policies are made with input from professionalsStrong MOE-School-NIE partnerships
- •Extended pedagogies that go beyond traditional didactic teaching, e.g., problem based learning, directed play, in NIE and
- •Change in curriculum and assessment must go hand in hand
- Culture that facilitates multidisciplinary learning among both teachers and students

Universal principle

- •System coherence (policy, preparation,
- •Shared vision (buy-in) and common language of shareholders
- Underpinning philosophy that permeates the design and delivery of curriculum and programmes (not stand alone or add-on)
- Focus on values, skills and knowledge needed
- •Emphasise both process and outcomes
- ·Quality and preparedness of teachers is a key

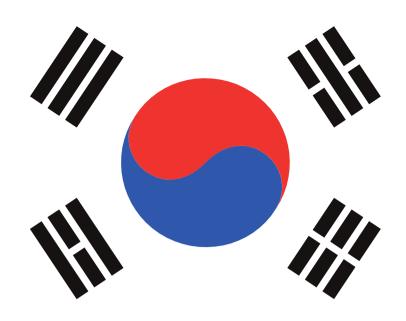
Reflecting "best practice"

How to use the case

•As an initial teacher preparation programme to develop autonomous thinking teachers for the 21st century

Other Issues

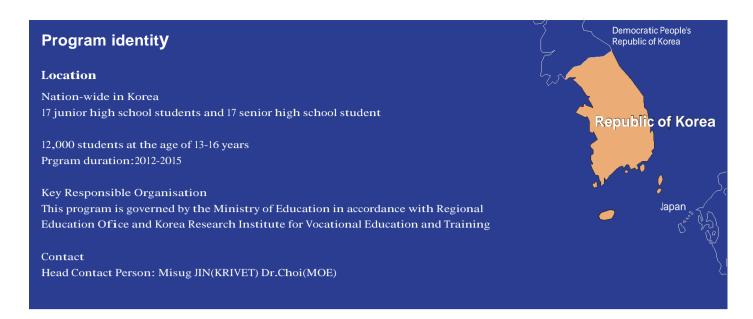
•Change in mind-set needed



"The School Creative Career Education Program (SC+EP)"

REPUBLIC OF KOREA





The Development & Implementation of this program

(Rationale)

The SC+EP (School Creative Career Education Program): New Paradigm of Career Education

A rapidly changing society such as Korea's requires greater levels of innovation in education in general and career education in particular. In the context of the sharp increase of the number of college graduates and the increase in unemployment in Korea, there has been sometimes desperate efforts to seek an alternative and creative approach toward education. The Ministry of Education(MOE) in Korea recently created the SC+EP (School Creative Career Education Program) and has disseminated it to schools by providing the materials and teacher training and test running the program in a number of schools. We selected the SC+EP as it has unique and important features as an innovative educational policy in Korea. The key features of the SC+EP in terms of policy concept and the implementation process means that it may have worthwhile applications in other countries as well.

The SC+EP is not a specific program but a new paradigm of education which is composed of several diverse programs. While the SC+EP was first implemented only 4 years ago, it represents an attempt at an active and systematic approach to education by the Korean government with its futuristic perspective and focus on the world of work. It is also a nation-wide project. This program has been financially supported by the Ministry of Education



in accordance with 17 Regional Education Ofices. The framework and contents have been developed by a national research institute, KRIVET (Korea Research Institute for Vocational educational Training).

There are unique points in terms of the implementation of the SC+EP. First of all, the SC+EP has been implemented based on clear goals and objectives of career education developed by the MOE. The goal of career education is to develop the career development competencies of students. Clear goals and objectives are defined in behavioral terms for students, who it is anticipated, will experience changes for the better during the programs. Secondly, before implementing the program at schools, the MOE and regional ofices provided the teacher training programs with

diverse methodologies. Specifically experiential learning has been emphasized in the teacher training for the SC+EP. In addition, the SC+EP has been improved on a continuous basis by running pilot programs in schools. Finally, the SC+EP is designed to utilize smart tools such as tablet personal computers or on-line mentoring. By utilizing these smart tools, it can contribute to the reduction of the disparity among different regions in education as well as innovative learning processes in the classroom.

Thematic field

(Methodological Considerations)

Creative career development activity program

The creative career development activity



.Wifi Program and Young mentor

program is an activity-oriented program based on career education goals and achievement indicators. The creative career development activity program has been developed with the four attributes of career education in mind, namely creativity, integration, lifelong focus on self-improvement, and focus on participation/experience. Activity programs have been developed with various learning activity methods in each field for the different school levels: middle schools, ordinary high schools, specialized high schools, etc. The program consists of various classroom activities such as lectures, discussions, role plays, entrepreneurship, advertising, etc. and out-of-school activities such as work-experience based learning. The creative career development activity program for middle school students consists of various individual activity programs focusing on each of the career development competencies. A total of 72 activity sheets have been developed for middle schools.

Entrepreneurial Education Program: WiFi(Word Idea Find Idea)

Some of the basic creative career development activity programs are also available in more expansive versions, which could be used as standalone activities. Business start-up and career programs for creative career development have been designed as an intensive program. It can be run for over 30 periods. Named WIFI, this program is highly important as a creative career development model. This program not only provides the knowledge and skills necessary for students to think about and implement goods and services using their own ideas and knowledge, but also promotes awareness that students could actually create their own jobs in the future.

-Self-understanding through theatre plays has been developed as a specialized component of the creative career development program. This function of career education serves to improve self-esteem and interpersonal skills, and has been developed to be run for over 15 hours. One of the most important elements of creative career development is the development of core competencies such as a healthy self-perspective and communication skills. Role playing allows students to take on various roles focusing on a wide range of topics. It is an important tool for learning how to express oneself, how to communicate with others, and how to treat others with respect. In particular, career education role playing is not only fun and interesting, but it is an effective program for actually cultivating the basic competencies.

Career education smart workbook

The first resource to be developed in line with career education goals and achievement indicators was the smart book. The smart book was designed in four versions, for elementary schools, middle schools, ordinary high schools, and specialized high schools. The rich array of its content in textual format, self-tests, videos, etc. makes it easy to use in a classroom environment. The smart book also allows students to perform various activities and share the results with one another as a complement to teacher-driven lectures. As it is the first smart book in Korea, It could serve as a pilot case of classroom innovation in terms of content and format. Use of smart books in classrooms is often dificult due to lack of tablet PCs, which are required to use the smart books. To address this issue, a web version of the 'Career and Jobs' workbook is also provided for use outside the tablet PC format.



Teachers' Training for Experiential Training of WiFi

Teacher Training

Before SCEP implementation, teacher training program was provided to teachers. Furthermore, 100 middle school teachers and 100 elementary school teachers were given SCEP lecturer training in the first half of 2013 and are currently being used by the regional ofices of education for SCEP training. The results of the pilot run at the 17 middle schools were analyzed meticulously in terms of field applicability and effectiveness. The results of analyses were used for developing a field utilization manual, and the program will be disseminated nationwide starting from the 2014 winter training session. In 2014, pilot schools will be selected from amongst high school and elementary schools. Then, a field application manual will be developed based on the results of the pilot run for further dissemination of the program.

Business-Education Partnership

Community based work-place learning. In order to provide realistic and easily accessible places, career teacher at each school tries to coordinate with community. The schools at city areas are at advantage to obtain diverse cooperation from workplaces and thus students can have better chance to experience diverse types of workplace or work.

To provide work-based career exploration experience, it is important to obtain from cooperation from the work-place. It is not easy in Korea like other countries. Thus, in addition to going out to workplace, SCEP brings the workplace and real-workers to school through cyber mentoring. Especially the students living in the remote area far outside the city, this cyber mentoring is a real interesting and meaning tool.

To link with the real business world and realistic understanding, SCEP finds out

diverse young role-model who creates their own career or workplace. The young career creators appeals to young students even though they do not have established careers yet.

Flexible and creative implementation of SCEP

SCEP can be implemented in various ways at school level. The program can be implemented systematically using both the smart workbook and the creative career development activity sheets during free choice activity time at school pursuant to the career education goals system. If necessary, and where possible, various work experience opportunities can be provided along with career counseling for personalized career guidance for students. As a career education program designed to promote creative career development activities based on the school career education goals system, SCEP consists of various program elements and boasts a high level of flexibility in its implementation. In other words, the program can be used to provide a unique form of career education that adapts to the features of each school. Customized utilization of SCEP based on the school's characteristics is essential in order to provide full support in the career development of students. However, despite the different emphases, it is important to faithfully reflect the principles of creative career development, integration, and a focus on experience, as outlined in the career education goals and to adequately utilize the common core elements. As regards the school's characteristics, the following may be considered: the direction and vision of education pursued by the individual school; characteristics of students (academic achievement, career after graduation, attitude, and passion); characteristics of parents; characteristics of the local area, etc. The following table shows examples of SCEP utilization according to school characteristics

As regards introducing SCEP, one middle school was selected in each of the 17 education ofice regions and the program was implemented in those 17 schools for one whole year in 2013. In order to support the active use of the smart workbook, tablet PCs (at least 1 unit per 2 students) were provided in the career department of each school and support was provided to promote the active utilization of the creative career development activity program. As mentioned earlier, SCEP consists

of various components and is highly versatile depending on the characteristics of each school; it was verified during this time that SCEP could be implemented in a wide range of ways for each of the 17 pilot schools. The characteristics of the program varied significantly from one school to the next. Implementation was particularly different depending on the characteristics of the teacher, the school's emphasis on career education, and the characteristics of students. By and large, three main forms of program implementation were identified. Some schools meticulously applied and improved the creative career development activity sheets during 'Career and Jobs' periods or during the creative experience activity and career activity periods based on the characteristics of the school. Some schools mainly used the smart workbook in combination with additional online tools. Others concentrated on specific programs such as career education role plays and the career education program using WIFI. At the end of 2013, the students' career development capacity was found to have improved drastically following the pilot run of SCEP.

Rationale and Aim of the Program

. SCEP is trying to develop students' own creative career development competency and thus prepare them for both the existing jobs and non-existing job. In this program, creativity is the main indicator. As creative career development (creating and designing new careers and jobs) is becoming a highly important component of career education in a rapidly changing world of jobs, and given the trend of "jobless growth" in the labor market, the ability to seek new solutions and view problems in new perspectives must be cultivated to enhance creative career development. In addition, SCEP focuses on lifelong and self-directed competency. Autonomy and self-improvement must be expressed in career development as it is a lifelong process. SCEP tries to provide participation/experience: Rather than passively absorbing objectified knowledge, students must be able to identify their own issues and develop their own competencies through voluntary participation and activities. The program should not only contain textbook-centered classroom lectures, but should be designed to require the ac-



Real-time Cyber Mentor

tive participation of students in various activities.

Age group involved

SCEP is mostly for the youngsters at primary schools (7-12yrs), at junior high schools (13-15 yrs.) and senior high schools (16-18yrs). Different levels of programs were developed according to school level. Mostly SCEP has been utilized in junior high schools.

Beneficiaries of program

Clearly students are SCEP's the most important beneficiary. SCEP provides the opportunity to develop awareness and competency to students. In addition, by providing training to teachers, teachers can also be beneficiary of this program. In general sense, by developing the students and teachers capacity to better preparation, Korean society can be beneficiary.

Size of Program

In 2011, one example school, 150 students participated in this program. 2012, one example school, 500 students participated. 2013, at 17 junior high schools, 5,000 students participated. In 2014, at 17 junior high schools and 17 senior high schools, 12,000 students are participating. MOE has provided about 30,000 US Dollar to each school for this program. During last 3 years, about 4,000 teachers were provided teacher training for this program.

List of activities

(prioritized order)

Career Activity Based Program: 17 examples schools implemented the career activity based programs at class. Each school has implemented in different ways with basic elements of the program considering the unique characteristics of each school.

Learning with Tablet PC:

At 17 example schools, students could use TPCs at class hours. They collect data and analyze and develop their plan.

Some of schools focused on WIFI program:

A Team at junior high school developed the business plan, that is, to build a travel agency company which provides their city tour program to students to other regions.

Workplace learning:

At example schools, students went out to community to have work experience. As most students are junior high school students at career exploration, visiting workplace and interview with workers or employers could provide them the general sense of workplace and the opportunity to get to know diverse occupations and workplaces.

Cyber Mentoring:

In 2013, 57 schools were provided online mentoring. 5 mentors introduced their work and workplace and answers to students' questions. Each session, 5 schools at different regions participated together and thus students could communicate with students with other regions.

My dream finding with theatre Performing theatre, students could develop communication skills, interpersonal skills, team-work building. At one school, with the support from the mentor, a play-writer, many teams performed

theater and had competition.

Drivers

At policy level (strategically): The will of policy makers, Ministry of Education, along with the support from the expert groups in this field was main driver for developing and implementing of this program. Due to rapidly changing Korean society, it is imperative for the government to innovate school and education.

At learning perspective
Learning by doing, instead of paper and pen and, text, method provides a good driver to learners. Making a business idea paper and presentation enhances self-confidence of students. In addition, the



Presentation of New Career Design

smart pc, smart phone, online mentor also stimulates students' motivation a interest in learning.

At Organizational level

Principal at schools and teachers try utilize the opportunity to support sch provided by MOE. The financial supp from MOE must be one of importa drivers to schools. For teachers, train for new teaching approach with dive learning materials played importa drivers.

Resources

Most of programs come from Career Development Cente(CDC) at KRIVET.CDC is R&D cencer, supported financially by MOE.

CDC develops acivity based programs and smat books, teaching guideline manuals.

Assessment

Last year, KRIVET analyzed the program results using by pre-post test to control groups and SCEP groups. The reulst showed a significant increase of SCEP students in terms of career development comptency test, The test is a self-report one and thus has a limit to figure out the performanc of students.

Sources/Funding

The funding comes mostly from Ministry of Education. Some or 17 regrional ofices supported more by their own funding. Each example school received 30,00 US dollar for this program. Each school has to share their programs with other schools nearby either by teachers workshops or conferences



. Exploration with Smart Book



Career Exploration through drama Program (Wedding Expression with Newspapers)

Available Materials

All materials developed through this projecs were uploaded in the portal site, http://scep.career.go.kr. Whoever wants the materials, they can download.

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Reference

Jin, Misug. et. al.(2013). Career Education in Korea. Ministry of Education. Seoul: Korea. Jin, Misug(2013). Guideline for SCEP. Seoul: KRIVET

Best Practice

Best Practice (uniqueness)	Universal principles (transferable)
The SC*EP -is an integrative paradigm to educate creative career development competencies including social Competency and Creativity/Entrepreneurial Competencyis a nation-wide policy movement to for creative career development -tries to integrate innovative programs into the school curriculum - utilizes innovative teaching-learning technology such as such as smart workbooks or Real time cyber-mentoring:	Systematic support for teacher training before implementation is a prerequisite for sustainable development of innovative education. Continuous interaction between program design and implementation is more likely to bring about the expected output. Clear objectives/goals of the program are an essential element for the success of the program. Flexible manuals for implementation help the generaliziblity of the program.
Promotion of Case (positive attention) For mainstreaming of case	Other relevant issues of the case
Basic support for schools with teacher training, curriculum guidance with manuals is needed for effective school implementation Sharing experiences of pilot programs through diverse method including portal site, sps. workshops/conferences enhances the effects of the programs The SC*EP represents an example of new paradigm for career development Young entrepreneurs provide effective learning experiences to youngsters. Innovative technology for education such Smart books and real-time cyber-mentoring can contribute to innovative education.	Assessment of the output is necessary but difficult and takes a long time -Need to have a systematic evaluation process at all stages of the programs. Disparity issues in the benefiicary groups must be dealt with.