

## Entrepreneurship and Innovation Policy in Training Systems: A Case of South Korea

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### Abstract

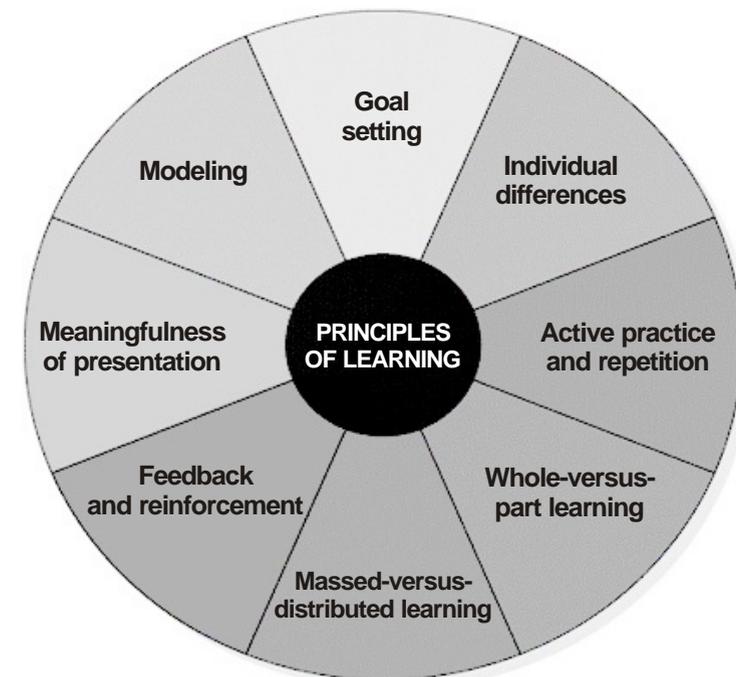
*A good training program for officials is a composition of many things. It is designed to address and solve performance problems. In this composition, the main objective is to drive changes in the behavior of staffs in order to achieve performance improvement. But the main question is what kind of changes are needed? A possible answer would be changes that support a capacity building framework for innovation and entrepreneurship abilities of officials in the administration system and the public administration structure. This research is an attempt to discuss the question and its answer. By using a research based on literature review and an expert analysis approach, need definitions, and utilization of national needs of the public sector, the findings were categorized into functions and recommendations. This paper also deals with a case of success in South Korea: National Human Resource Development Institute (NHI) in implementing a new training system for public administration officials and their achievements in the field of application innovation and entrepreneurship in training system. The recommendations focus on the need for assessment centers, reviewing policies and procedures, project level monitoring, monitoring the governance arrangements in wider systems, enriching the context, aligning human resource policies and training strategies and finally designing two sets of roles for training organizations so as to implement innovation and entrepreneurship in their training system.*

*Keywords: Public Administration, Training, Developing Organizations, Innovation*

### Concept

Training is any planned activity to transfer or modify knowledge, skills and attitudes through learning experiences in order to maintain levels of competence and respond to the demands of changing circumstances (MSH, 2012). Training is an effort to increase the knowledge, skills, and abilities (KSAs) of employees and managers so they can better do their jobs (Berman, 2016). Principles of learning must be considered in all training activities for officials (Figure 1) (Snell, 2014).

Figure 1: Principles of learning



Source: Snell (2014)

Training and development are used as a strategy for increasing the capacity of broad occupational categories, such as ensuring adequate numbers of procurement and program management officials (Clark, 2013).

The training environment for smart organizations has been changed due to new challenges; globalization, complexity, an aging population, immigration and transition to a knowledge based society. On the other hand, many national programs are not in a position to handle comprehensive training for policy makers and top level managers. Many of them did their educations through general system of state education but they have not been trained especially to be innovative and entrepreneur managers or officials (MSH, 2102).

The idea of training high-level officials like vice-Ministers or General Directors to be more innovative is still uncommon in many countries, even in developed countries. Sometimes it is said that these officials are already "very excellent" and in some cases "very committed" (to satisfy others why he is in this position!) and, hence, not in need of training. The typical perception of training is that it is needed by middle and lower level officials, while no emphasis is placed on the needs of higher level officials. It is the time to recognize that high level officials need more learning opportunities to deal effectively with big surprises as well as other nonrusting affairs, including economic

stagnation, pandemics, climate change, natural disasters, and glocal (global + local) issues (Kim, 2016).

The literature in this research focuses at the following two questions:

- How to design and develop an effective training program for public officials? (National Development Innovation and Entrepreneurship Program)
- How to use modern training methods during the training process? (Innovation and Entrepreneurship Training Policy)

### Challenges and Paradoxes

There are new challenges in Human Resource Management (HRM) environment including changes in the administrative system, formalization, openness, globalization, regionalization, specialization, technicalization and democratization. In order to respond effectively to these changes, we need to enhance national competitiveness on many fronts, particularly the competitiveness of the government. One of the key elements that determine the competitiveness of the government is discovering and developing excellent human resources. This is made possible by optimum training (Kook, 2016). The following challenges in this regard are considerable:

- Almost everyone emphasizes the importance of training for officials especially high level officials and all agree that in the past and in the present, these have been insufficiently emphasized but in action the training has been emphasized as a third category (Berman, 2016).
- In many public organizations, responsibility for training and development is shifted down-ward to individual employees, supervisors and units. This is a decentralization trend of training, which has occurred, and many organizations have eliminated training staff in human resource departments. This decentralization does not enable strategic perspective for training in organization. This trend does not emphasize the priority of training and development for employees and supervisors who are responsible for their training (Berman, 2016).
- In today's highly competitive environments in which competition is global and innovation is continuous, being able to adapt has become the key skills. The secret of being successful in comparison with other organizations is adapting to marketplace changes. If any organization wants to be protected from failure, it must be flexible and prepared for the fluctuations of the market because the situation of the market will never be stable for a long time, and organizations should have different plans for different situations in order to survive and being productive and successful (Snell, 2014). This trend is not so clear in public organizations, but innovation and entrepreneurship can foster the abilities.
- Countries' national education program itself is not in a position to handle comprehensive training for policy makers and mid-level managers as many of their

learning objectives are best handled through general management training (MSH, 2016).

- When the officials are provided with adequate training, they can strengthen their job capabilities and help make their government become more competitive. To achieve this ability, we need a shift in the paradigm of training and education in public sector for officials. The traditional paradigm of training emphasis is on planning and control, but the new one emphasis on the ability of competence (Soo, 2016).

### Strategic Approach

Training like many strategic activities needs a strategic approach (Hitt, 2014). Strategic planning is, by definition, about intent integration, long-term competitive based thinking and a comprehensive approach to decision making. It is also about innovative fact finding, involvement of differing interests, strategic wants and issues and general agreements of priorities.

Creating a planned approach, focused on agreed challenges and opportunities, and identifying responsibilities for making things happened (Duthchas, 2016). Also strategic approach is the definition of a strategy in which the means are prioritized to achieve an operationally defined strategic goal (RAND, 2009).

The training approach for officials is a strategic one. These strategic focuses include the followings: (Berman, 2016)

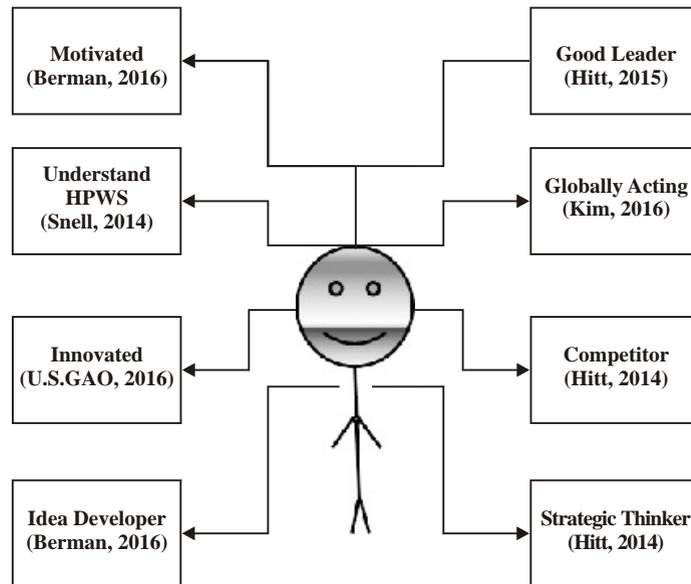
- Helping exiting officials to adapt to new tasks as a result of promotion, restructuring or other reassignments (performance).
- Assisting new employees to get updated on the unique procedures, equipment, or standards of the organization (performance and risk management).
- Ensuring that personnel in the jobs critical to the organizations performance and that have high costs of failure-perform in satisfactory ways (risk management).
- Using training and development (T&D) as a tool to ensure that desirable employees and managers stay current and develop themselves for future roles and hence stay committed to the organization (retention of human capital, talent management).
- Ensuring that all employees have knowledge, skills, and abilities (KSAs) that are consistent with what they need to help the organization move forward (planning).

### Who is a trained official?

This is an important question: who is a trained official? On the other words, when we are talking about a trained official what do we mean? (Figure 2). Government innovation starts with human resources innovation, and the development of high-calibre human resources is a driving force of human resources innovation. Future talents

fostered in accordance with new needs of administration public system and human resource development should stand the public innovation and enhancement of national competitiveness (NHI, 2016).

Figure 2: Who is a trained official?



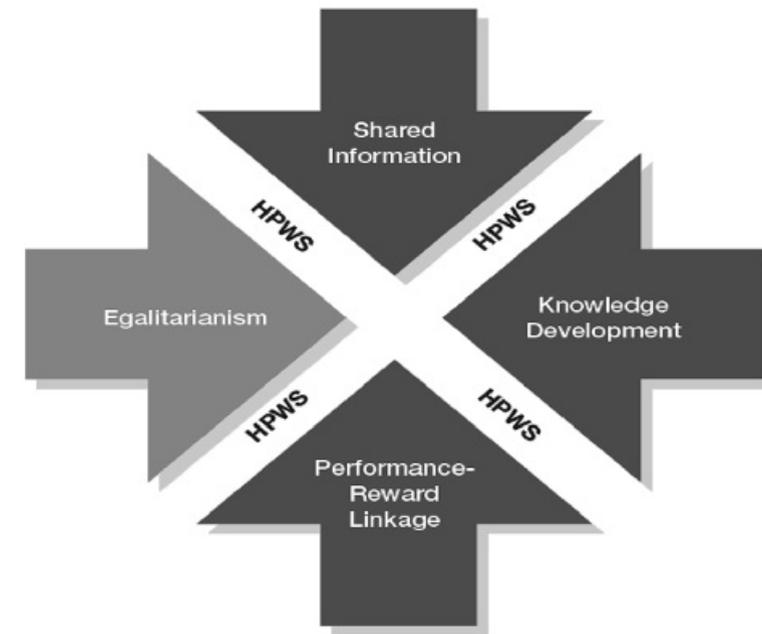
### He or she is a motivated one

He or she learns better when he is eager to acquire knowledge, skills and abilities (KSAs), he is encouraged to seek out application opportunities and make them work. Motivation is the driver or energy that compels people to act with energy and residence toward goals. One strategy for motivation is to ensure that officials understand the need for what they explain the reasons for training and the second one is management support with the consequences of training (Berman, 2016).

### He or she understands the HPWS

High Performance Working Systems (HPWS) involving a specific set of practices aimed at: increasing the quality of human capital by raising employee knowledge, skills and abilities; motivating employees to contribute greater discretionary effort; and empowering them to help deliver business goals and objectives, appearing to affect firm performance positively (Bacon, 2014). HPWS is a specific combination of human resources practices, work structures, and processes that maximizes employee knowledge, skill, commitment, and flexibility. Also HPWS is a system composed of many interrelated parts that complement one another to reach the goals of an organization, large or small (Figure 3) (Snell, 2014).

Figure 3: High Performance Work System



Source: Snell (2014)

### He or she is an idea developer

He or she is able to generate and submit his or her idea for improving one's own work. These ideas can be evaluated based on creativity, feasibility and effectiveness and finally separated for implementation in separate processes. Organizations that adapt significant numbers of new ideas are likely to increase their responsiveness, performance and innovation (Berman, 2016).

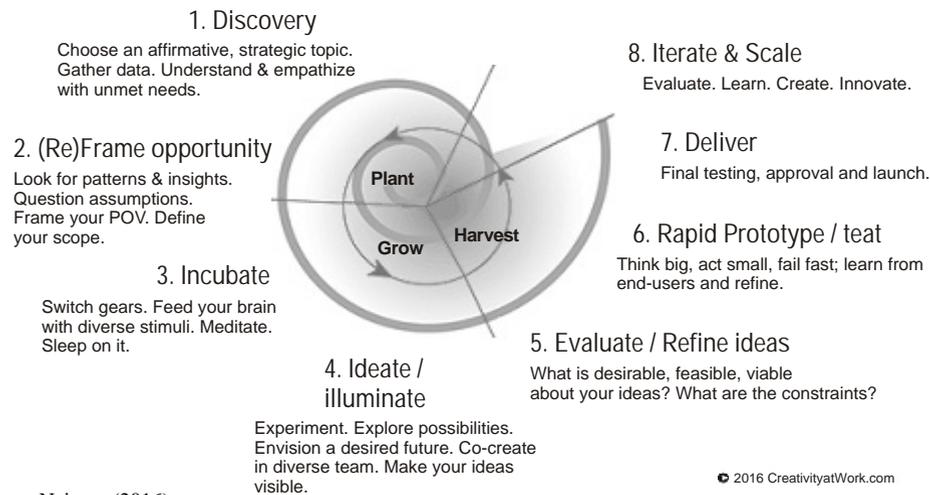
### He or she is a strategic thinker

Strategic thinker knows how to develop winning strategies and strengthen the organization's capacity to drive innovation (Harvard, 2016).

- Build innovation into the strategy development process.
- Design innovative, go-to-market strategies that fuel growth.
- Create more value and secure a competitive advantage.
- Identify and exploit new markets that are uncontested.

He or she knows how to create a strategy for guaranteeing that innovation and creativity flourish in the organization? (Figure 4) (Naiman, 2016).

Figure 4: Creative Thinking Process



Source: Naiman (2016)

**He or she is a good leader**

A learning organization needs managers and leaders who support learning and the search for improvement that implies. This is the ability to manage strategically the changes, to lead people, to build coalitions, to manage business functions, to be results driven, to apply technical knowledge, to calculate risks, to be decisive, and to be customer focused (U.S.OPM, 2010). In addition, they must be able to provide qualities associated with forward looking, open to innovation, able to implement change, and able to bring out these qualities (Berman, 2016). Good leaders enable community building (Trust), foster innovative communities (Creativity), judiciously share power (Wisdom) and inspire change (Courage) (Dumster, 2015).

**National Human Resources Development Institute (NHI)**

It is a well-known fact that national development in Korea especially in the rapid economic growth has taken place largely because of the country's highly educated human resources (Kim, 2014). The education has two parts: one by regular education systems done by schools and universities, and second by training institutes.

National Human Resources Development Institute NHI (former COTI) was established in Seoul as the National Officials Institute in 1949, and was recognized and renamed as the Central Training Institute in 1961. It was relocated to Daejeon in 1974 and had its current home at the front of Gwanak Mountain in Gwacheon in 1981. NHI is scheduled to open a new campus in Jincheon in late 2016.

NHI operates under Ministry of Personnel Management (MPM) of Korean government under a vice-ministerial structure. The number of staffs at NHI is 144 now, and NHI provided training to 296,000 public officials over the past 67 years. NHI

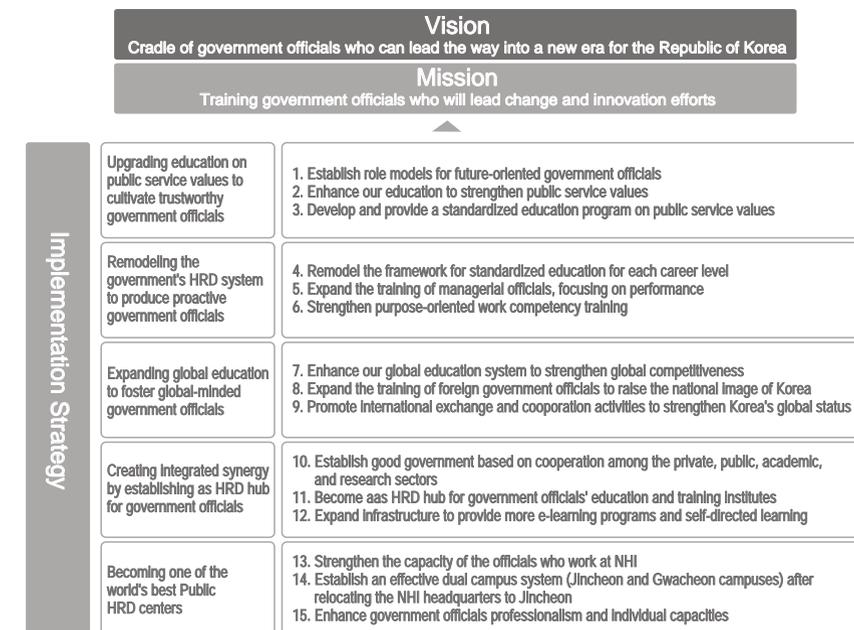
provides leading training services to public officials, giving in-class training to 10,000 officials and cyber training to 100,000 officials every year. More than 4,500 foreign officials from 133 countries have completed training at NHI since 1984 (NHI, 2016). NHI is an important and top priority center for Korea government, since 1981 the Korean president has attended NHI training programs, including the National Strategy Seminal, 28 Items.

**Vision and Mission**

NHI plays an important role as the national training and education hub by setting standards in public service values and leadership; engaging in the research, development, and evaluation of training courses for public officials' competency development; and leading exchange and cooperation activities with public and private training and research institutes at home and abroad (NHI, 2016). In this regard, based on the NHI mission and vision (Figure 5), the main objectives are:

- To develop outstanding government officials by providing general and specialized training for central government employees.
- To serve as a support center for other public-sector training institutes across Korea while promoting cooperative and exchange activities with private-sector HRD centers.
- To widen Korea's global network through international training and exchange activities with internationally recognized institution.

Figure 5: NHI Mission and Vision



Source: NHI (2016)

As the president of NHI stressed, NHI has established a Human Resource Development (HRD) strategy for a new start. This strategy is an attempt to: (NHI, 2016)

- Strength education on public service values by arranging a set of courses on public service values and providing the training of officials and playing a role as a strategic partner of the current government administration by sharing and publicizing its national vision.
- Ensure quality training by offering customized training to government officials and creating a director level leadership course to enhance the capability of managerial level officials.
- To implement HRD 3.0 as a new paradigm for government operation that features communication, openness and sharing and to build cooperation networks with other public officials training institute and universities, research center and advisory panels.

Based on these attempts, NHI is preparing major reforms by implementing new strategies and new operational framework (figure 6) in its structure to become one of the best HRD institutes, an institute that fosters Korean public officials into the best talents, and an institute that spreads public service values, leadership, and competency development programs to other domestic and foreign institute (NHI, 2016).

Figure 6: Operational Framework of the National HRD Institute



Source: NHI (2016)

Training programs of NHI are combinations of seminars, speeches, workshops, development program for leaders and officials, competency development program, national strategy seminar and international programs for foreign government officials in face to face and virtual structure in a four stage processes. NHI has arranged a set of courses on public service values and provided the training to Korean officials. By the training program, NHI seeks to disseminate public service values among high ranking officials who are responsible for policy initiatives. These programs are managed in 5 levels (Figure 7).

Figure 7: 2016 NHI programs at a Glance

	Public Service Values	Leadership	Global Mindset	Professional Training
<b>Primary Content</b>	<ul style="list-style-type: none"> <li>Understand and practice Public service values including perspectives on The nation, public service, and ethics</li> <li>Share and disseminate the current administration's philosophy and policy direction</li> </ul>	<ul style="list-style-type: none"> <li>Define the role of each grade and increase core competence</li> <li>Increase professional competencies, such as the knowledge needed for the performance of public duty</li> </ul>	<ul style="list-style-type: none"> <li>Understand the global environment and promote global thinking policy mind-set</li> <li>Strengthen professional global competencies including the ability to carry out international affairs</li> </ul>	<ul style="list-style-type: none"> <li>Government policy initiatives and job skills training</li> <li>Computer literacy and organizational dynamics</li> </ul>
<b>Deputy Ministers - Directors General (Senior Civil Service)</b>	Major Government Projects Seminar	Senior Executive Program		
<b>Division Directors (Grades 3-4)</b>	Intensive Program on Public Service Values	New Senior Civil Service (SCS) Members Program	Global Foundation Programs Global Professional Programs Long-term Overseas Fellowship Programs	International Programs for Foreign Government Officials
		Senior Executive Service Candidates Program		
		New Division Directors Program		
		Division Director Candidates Program		
		New Grade 5 Officials Program Grade 5 Candidates Program		
<b>Grades 4-5</b>		New Grade 7 Officials Program (Open recruitment) New Grade 7 Officials Program (Recruitment via recommendation, by region)		
<b>Grades 6 and below</b>		New Grade 9 Officials Program (Recruitment via recommendation, by region)		
		- Part-time Employees Program - Disabled Employees Program - Professional Specialists Program		<ul style="list-style-type: none"> <li>State Policy Initiative</li> <li>Common Core Job Training</li> <li>Computer Literacy</li> <li>Organizational Dynamics</li> </ul>

Source: NHI (2016)

NHI also operates education courses for foreign government officials to support the development of developing nations by sharing Korea's experiences in national development and establishing mutual cooperation systems through exchanges between government officials of many nations, thus enhancing the international image of Korea and contributing to global society.

### Trends and Challenges

To achieve its new vision for becoming "a leadership center for a greater Republic

of Korea", NHI needs to provide training that changes public officials' "way of thinking". Thus, with a view to inspiring public officials to think in a bigger, faster, and fairer way, NHI has strived to increase trainees' satisfaction, and has drastically improved its training infrastructure and environment by introducing new training programs and private-sector training techniques (COTI, 2013).

Believing that the quality of lecturers determines the quality of training, NHI is endeavouring to invite the best lecturers to its programs. Because it is a public officials training institute, NHI is subject to some unique constraints, such as only being able to offer lecture fees that are one-third of the amount paid in the private sector. Nonetheless, by introducing the Best Lecturer Award and improving the lecture fee payment system, NHI has been able to arrange for the best lecturers, and thus improve the quality of training.

New attempts have been made to improve public officials' emotional sensitivity. The House of Communication, an open-air tent-like structure, is operated at NHI so that public officials not only receive training at the institute but also enjoy the pleasure of forming new relationships and communicating with others. NHI is transforming the formerly rigid civil service culture into a communicative one by promoting communication and friendships among trainees and between trainees and teachers.

The creativity and innovative approach of public officials is essential for national development. So various cultural and arts programs, such as arts performances and cultural lectures, were introduced by making a cooperation agreement with the National Theater of Korea and the National Museum of Contemporary Art. Meanwhile, NHI developed the Olle Trail, a walking trail lined with herbs and wildflowers and offering a viewing platform, which has made the institute a bright and vibrant space that satisfies the five senses.

To achieve these goals HRD will become increasingly important to support the success of state administration. This means that the role of training institutes will be emphasized more in implementing national development items. In addition, there must be a variety of customer-oriented target-specific training programs. NHI must provide specialized training reflecting officials' grade-levels and personal preferences, and offer retraining to build the competencies found lacking, through feedback from other trainees, in individual officials by considering the following items:

- Expanding training programs aimed at helping share and disseminate the direction of the new government's state affairs management.
- Fostering the competency of government officials by strengthening public service life cycle-based training.
- Providing full-fledged Smart Learning using new learning models.
- Enhancing training programs aimed at strengthening cooperation with foreign countries and the private sector.

- Seek to strengthen the international competitiveness of Korean officials.
- Put sizeable effort into expanding and developing its international programs available to foreign government officials, as part of an effort to increase the number of Korea's cooperative partners in the international area.

### Methods for officials training

As mentioned in concept, training is any planned activity to transfer or modify knowledge, skills and attitudes through learning experiences to maintain levels of competence and respond to the demands of changing circumstances (MSH, 2012). Training is the effort to increase the knowledge, skills, and abilities (KSAs) of employees and managers so they can better do their jobs (Berman, 2016).

A usual program for training can be made up of five modules: public service values and the current government's administrative philosophy, general administrative skills, leadership and management competencies, sensitivity training, and communication skill. The training of the employees in South Korea managed by NHI is a process which involves four steps:

Step 1: Needs assessment

Step 2: Developing the training program

Step 3: Implementation the training program

Step 4: Monitoring and evaluating the training program

### Step 1: Needs Assessment

There are many needs in the field of officials training that must be covered by content and also new methods of training. Such needs can be characterized as the following: (Sub, 2014)

- Need to enhance training on the administration's philosophy and on administrative tasks. In this regard it is very important to consider local needs and think about native methods.
- Need to reflect a global trend for training center to develop creative human resources with multidisciplinary competencies.
- Need to respond to changes in education environment.
- Need to create public officials with multidisciplinary competencies and global mindsets.
- Need to customize training for each participant.
- Need to establish "smart "training changes in the education environment to keep up

with developments in information technology.

To meet these needs, many old and modern approaches are discussable: on-the-job training, mentoring, in-house seminars, web based learning, professional conference attendance, formal education and etc. (Berman, 2016). But this research stress is on some new methods for officials like those are more capable to promote the abilities of innovation. Approaches like innovation and development hubs, centers and labs, simulation, role-playing, idea development, creative thinking, ethics training, future studying, talent pool, elite management and etc.

### **Step 2: Designing the Training Program**

In this step of training, the goals of training program must be determined, and the training method chosen should be suitable for organization goals and needs. The program must be able to explain the suitable situation for implementation of the training program based on instructional objectives that represent the desired outcomes of a training program (Snell, 2014).

### **Step 3: Implementation the designed training program**

The next step is preparing the situation for implementation of the designed program. It is better to choose the examples from the real environment because the subjective or mental examples and training don't conceive easily by trainees.

### **Step 4: Evaluating the Training Program**

One of the weakest parts of public officials is lack of evaluation system or monitoring procedures in place to assess the effectiveness of training. It is important to conduct a satisfaction survey of participants immediately after the completion of the training program. The monitoring team must conduct cost-effectiveness analyses and feasibility studies on training programs on a regular basis and establish a system of evaluating the program after they are implemented (Soo, 2016).

The evaluation of innovation concept in training program as a policy instrument in training process for governmental officials is a vital task. It must be monitored regarding the value of efficiency and considering performance measurement and quality. In some cases, it can be focused on quality assurance systems. In other words, it has strong affiliations with the concepts and methods of providing innovation management and with concepts that whether the program has been able to increase the skills of innovation and entrepreneurship of officials.

Through the development programs of training based on innovative approach, research centers, and training centers must raise new questions about the quality and relevance of their systems and approach for program evaluation. This trend can be seen as a response to the increased size, complexity and diversity of the public organizations in terms of human resource capacity building, administrative, financial, employment

and organizational affairs. So they need developments in their program with special attention to the issues accrediting state long term innovation program. In the case of effectiveness, balancing the combination of three capacities: creation of knowledge, diffusion of knowledge, and absorption of knowledge must be achieved (Nauwelaers, 2008).

After the implementation of training programs, the designer usually prefers to evaluate the training programs. The evaluation of the programs helps us find the advantages and disadvantages of the designed programs. Usually we use four criteria for assessing the success of the programs: relevance, effectiveness, efficiency, impact and sustainability (Lee, 2016).

### **Training Strategies**

Today developed organizations try to establish an innovation based system to deal with new challenges and opportunities to achieve knowledge economy. In this strategy, training institutions play an important role as a major source of job creation and entrepreneurship (European Commission, 2002). In this process, enhancing public sector innovation performance is a key element for government. Successful organizations understand that improving service delivery requires implementing the right innovation management strategy by empowering the officials of public sector.

In this regard, the national training system as the main holding factors in developing countries are important, but the research presents the idea of a shift from the regular training system of innovation, to professional training institutes as the major engine for creation innovation in developing countries management system based on a knowledge based system training.

To meet the needs, many modern approaches are discussable: on-the-job training, mentoring, in-house seminars, web based learning, professional conference attendance, formal education and etc. (Berman, 2016). But this paper stresses that some new methods for officials are more capable to promote the abilities of innovation. So new approaches can be useful in this regard:

**Innovation and development hubs:** Some pioneer public organizations have created innovation hubs to provide spaces in which groups of employees and managers can discuss common challenges and find support in implementing new solutions. These hubs can be small offices staffed by a few employees who are able to assist in the development, awareness, and diffusion of new processes. Such efforts acknowledge that while mentoring, in-house presentations, and webbased learning and largely individual centered, group support is also needed to help foster organizational change (Berman, 2016). A good example of mentioned hubs is U.S. Office of Personnel Management Innovation Lab, which started in 2013 to generate concrete solutions for problem in HRM (U.S. GAO, 2013).

**Simulation:** Vestibule or simulation training is the use of separate areas where workers practice skills or accesses without disrupting on-going work activities. Such experiences help managers to assess staff performance under real-life conditions (Gillespie, 2002). During these trainings, officials are advised of new expectations and are provided opportunities to discuss how they can best handle service challenges (Berman, 2016).

**Idea development:** The practice of officials generating and submitting ideas for improvement can be a vital method for promotion of officials' innovation. They learn how to produce ideas and how to manage the evaluation of the large number of ideas. Results show that the proportions of officials who view their divisions as innovative are more than doubled, suggesting that such efforts can indeed jump-start innovation in public sector (Berman, 2016).

By this method, officials are able to generate and submit their idea for improving their own works. These ideas can be evaluated based on creativity, feasibility and effectiveness and finally separated for implementation in separate processes. Organizations that adapt significant numbers of new ideas are likely to increase their responsiveness, performance and innovation. There are a lot of good experiences for idea development in Japanese production processes and Seoul Metropolitan Government (Berman, 2016).

### **Capacity Building for Entrepreneurship and Innovation**

Public organizations in developing countries need structural and technical assistance in the form of entrepreneurship and innovation capacity building based on new accepted paradigm in their national education and training system. This capacity building focuses on public training institutes as the second innovators in national innovation system after formal innovation system in schools and universities. This entrepreneurship and innovation training structure enables the public organization to achieve measurable results that will be acceptable to reinvent entrepreneurship and innovation capacity building structure in public sector based on knowledge sharing and knowledge society practices.

On the other hand, in pioneer training institutes, there is a visible trend in improvements, particularly with the capacity building programs in public management sector that increase entrepreneurship capacity of public activities. So it is important to support these experiences in developing organization training system, build on the existing results and achievements and focus on furthering innovation in training section.

The key factor for successful implementation of entrepreneurship and innovation capacity building structure is acceptance of the priority and results by all stakeholders in public sector. This ensures the sharing of responsibilities for entrepreneurship and innovation management and facilitates the transfer of entrepreneurship and the experiences gained. These factors will contribute to the sustainability of the training

project outputs and results. The development and application of produced knowledge must be relevant and in context to the public sector's objectives and the stakeholders needs. Optimum entrepreneurship application is only delivered as part of the innovation processes of the training programs. The objectives and measures of each training program must be common. Most importantly, knowledge growth and use must be specifically related to the individual and organizational objective setting, incentive and reward mechanisms of the organization.

On the other hand, successful entrepreneurship and innovative training programs focus on aligning knowledge and employee development with strategic initiatives in public sector. To achieve this goal, training activities must be integrated into the administration processes that drive entrepreneurship and innovation performance. Linking entrepreneurship and innovation with corporate strategy in the training process has two components:

- Training systems must be integrated with administrative operations systems.
- Training management must be managed as a mission-critical component required advancing and achieving an organization's objectives.

Reinventing capacity building structure for entrepreneurship implementation in training section of developing public organizations must present ambitious objectives to be achieved in a highly diverse environment. It will jointly require a focus on specifics, such as the details of individual directives, and wider generalities such as strategic issues. This is particularly relevant while development and application of the benchmarking tools tailored for the training participants. This diversity requires an effective management and co-ordination structure and a clear statement of objectives, roles and responsibilities.

So the objectives include:

- How to ensure that the capacity building activities and training modules will be developed with participation of officials that will ensure acceptance of the results and commitment?
- How to ensure that substantial research and analysis on the international benchmarking in the field of innovation and entrepreneurship training practices will be undertaken?
- How to ensure the transfer of experience and knowledge to those stakeholders that are not able to be present at the training due to barriers or limited absorption capacity?
- Early development of clear communication mechanisms and channels of communication to facilitate data transfer and the development of working relationships between higher education sections and training institutes.
- Early definition of the exact objectives and expectations of the project from various

parties.

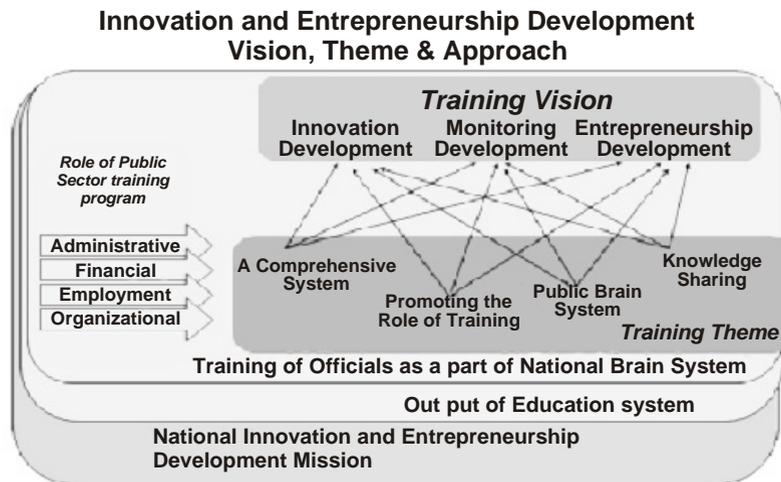
- Development of clear management structures, implementation procedures and formats.
- Strict timings for the different project steps and approval procedures within the project of training.
- Effective quality assurance allowing for comment by local parties/stakeholders.
- Regular monitoring and dissemination of progress reports to ensure continued relevancy to all parties in training.
- Ensuring that experts focus on providing practical advice in an implementable format which focuses on recommendations and the means for achieving and implementing them.
- Final assessment of e-readiness in training section of developing organizations.

**Functions**

Our focus on the capacity building process of the innovation and entrepreneurship training activities in public sector follows the participatory approach throughout all capacity building activities to have a better knowledge based system.

These tasks can be verified by making some changes in the design and performance of agencies providing training innovation in the public sector. These tasks must be done based on national development innovation and entrepreneurship program by allocating a large proportion of resources, devoting to the innovation section and it could be best served by improving the efficiency of the exiting evaluating system (Figure 8).

Figure 8: National Development Innovation and Entrepreneurship Program



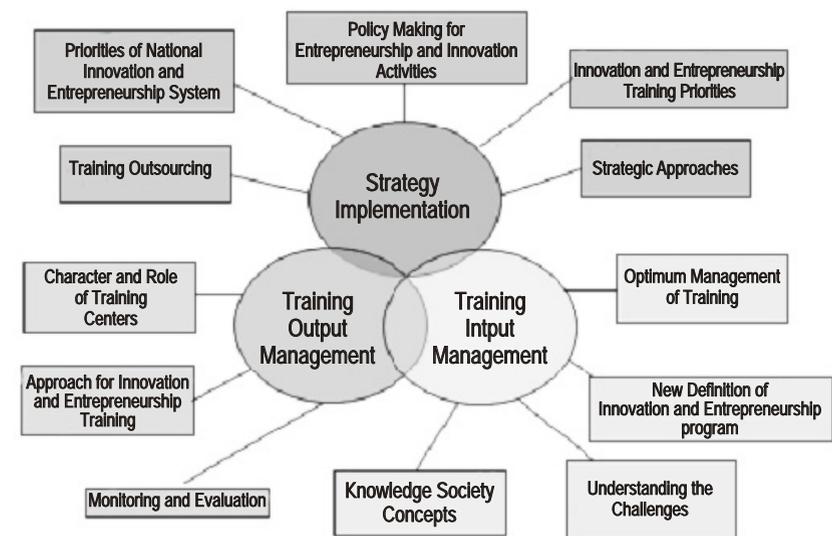
It is well recognized that the current training activities for officials in developing countries are costly, time consuming, and require long term programming, and in many cases do not have adequate efficiency and productivity. In order to minimize the risks as well as to ensure acceptance and sustainability of the capacity building programs, the following tasks must be strictly followed and monitored:

- Task 1: Entrepreneurship and innovation need assessment in training section of public officials.
- Task 2: Identify the main stakeholders in an entrepreneurship and innovation based training system.
- Task 3: Conduct "Focus Group" discussion with the beneficiaries.
- Task 4: Monitor Participation and Satisfaction of officials/ Participants.
- Task 5: Creation a National Structure or Network pattern for entrepreneurship and innovation training in public sector.

**Recommendations**

The recommendations in this paper have been compiled from the training protocols in literature, policies and procedures submitted by governmental training organizations based on the concept of discovering core competencies in some countries providing smart systems in the structure of domestic training for officials in public section. The results and experiences are applicable for other organizations based on innovation and entrepreneurship training policy which is a component of strategy implementation and training inputs-outputs (Figure 9).

Figure 9: innovation and Entrepreneurship Training Policy



These recommendations focus on the needs of assessment centers, reviewing policies and procedures, project level monitoring, reviewing the governance arrangements in wider systems, context of official training, alignment of human resource policies and training strategies and finally designing two sets of roles for training organization to be able to implement innovation and entrepreneurship in their training system:

The first set of roles can be verified by making some changes in the design and performance of training agencies providing various kinds of researches, and also innovative actions to provide better environment for official training. The second set of categories that can be alleviated by a major change in national training system objectives would give very high priority to an innovative development program.

In recent years, a variety of changes have been made at different levels of education and training of officials. All these changes must be balanced together in all educational and training institutions and government policy centers in order to develop and take advantage of innovation and entrepreneurship training management. The following recommendations are:

- Good training programs for public officials depend on cooperation of all institutions that are responsible for the good governance and ethical in public sector. During the training, stages of the planning and conducting trainings (needs assessment, objective, institutions, trainers, training materials, program, and evaluation) must be discussed.
- It is important to use active learning methods where officials work collaboratively, discusses materials while role-playing, debate, engage in case study, takes part in cooperative learning. Active training methods for public management skills trainings are typical approach for innovative trainings and to deliver knowledge and to improve compliance. It is very important to demonstrate active methods to conduct useful trainings in practice, taking into account specific aspects of the innovative culture, local public administration paradigm, entrepreneurial aspects and the trainings that increase the ability of competence.
- Make the training atmosphere of officials brighter and more positive to enhance the trainers competencies based on a customer oriented training system to through actual experience.
- Organizing new attempts to improve public officials' emotional sensitivity based on this understanding that the creativity of public officials is essential for national development.
- Provide training that changes public officials' way of thinking (thinking ahead, thinking again, and thinking across) with a view of inspiring public officials to think in a bigger, faster, and fairer way to increase trainees satisfaction and self-stem based on a customer oriented training.

- Re-elimination of the existing policies in the field of innovation policy and knowledge management in public sector with concentration on knowledge sharing.
- Considering innovation agencies as a public brain system to advocate changes that will improve knowledge practice.
- Exiting an evaluating system as the main engine for creating innovation especially in e-government structure.
- Process innovation based activities as a major source of job creation and entrepreneurial results to achieve knowledge based society.
- Optimum innovation system empowers social vision that encompasses plurality, inclusion, solidarity and participation.
- Developing and strengthening the Centers of Excellence to support national development priorities.
- Do the implementation of science, technology and innovation policy reviews requested by governments to help them ensure that their policies in these areas support national development innovation and entrepreneurship priorities.
- Consideration of a shift in paradigm of training and education in public sector for officials. As the traditional paradigm of training emphasis is on planning, process and control but the new one emphasis on the ability of leading the individual, organizational and national (Soo, 2016).
- Considering the development of high-calibre human resources as a driving force of human resources innovation in accordance with new needs of administration public system and human resource development regarding enhancement of national competitiveness.
- Establish an effective plan for the placement of the trained resources at the right time in the right place by right costs regarding public human resources development elements.
- It is essential to foster top-level human resources for both the public and private sectors. So it is important to implement a long term national plan regarding public policy in innovation and entrepreneurship regarding the governmental studies to achieve global standards.
- It is important to think about new structure of monitoring for training of officials.in this regard it is important to move away from the previous direction, which focused on scale monitoring to a method on SWOT monitoring.
- It is important for public organizations to improve the competency of public officials focusing on sustainable resources refers to a resource to be able to survive in all conditions .in this regard professionalism and creativity are important as they enhance public service values education for public officials.

- Consideration of a shift in paradigm of training and education in public sector for officials. As the traditional paradigm of training emphasis is on planning and control but the new one emphasis on the ability of competence by the following items (Soo, 2016).

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