



**TAMAM Project**

**TECHNICAL REPORTS**

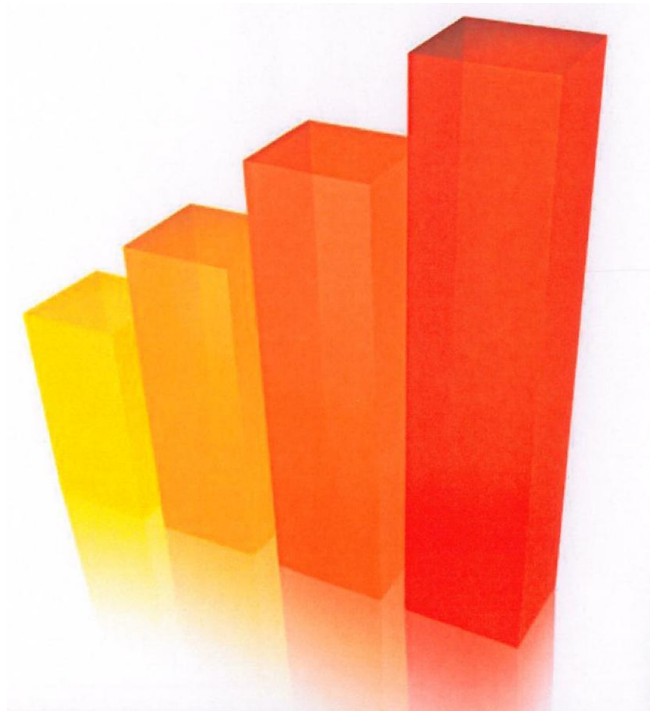
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**TAMAM: An Innovative Model for Educational  
Reform in the Arab World**

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# TAMAM: An Innovative Model for Educational Reform in the Arab World

## Introduction

This paper presents and discusses the TAMAM project, as a new initiative at school reform in the Arab world. The project departs from the historical approach to school reform in Arab countries, which has depended on top-down directives from the national government level (El Amine, 2005; Arab League Educational, Arab Cultural and Scientific Organization [ALECSO], 2008; Arab Knowledge Report, 2009; Middle East and North Africa [MENA] Report, 2008). While well-intended, this approach has not been effective in its implementation strategy, and has fallen short of applying the necessary changes at the school and classroom level (Bahshshur, 1982; 2010; Karami-Akkary and Rizk, 2011). In contrast, TAMAM follows a bottom-up, problem-centered implementation strategy, with the teachers and school staff themselves initiating and deciding on changes necessary to address specific issues related to their schools. The paper describes the design of the project, highlighting how it was conceived and planned by its initiators and the University team in charge of its development and implementation. It also presents a theoretical argument, highlighting the promising aspects of its implementation strategy. The study is based on the assumption that the way change is conceived and planned is a major contributing factor to its success or failure (Chenoweth and Everhart, 2002; Fullan, 1993, 2003, 2005; Fullan and Hargreaves, 1996; Fullan, Hill, and Crevola, 2006; McLaughlin, 1990, 1998; Wilson and Daviss, 1994). Specifically, the paper addresses the following questions:

- 1- What are the goals, strategies and assumptions of the TAMAM project?
- 2- What are the distinctive and most promising features of the TAMAM project model based on the available conceptual and empirical literature on effective school reform?

3- What are the critical factors associated with the success of this project?

### School Reform in Arab Countries: Historical Trends

School reform in the Arab countries has been mostly dominated by top-down mandates characterized by centrality of decision making, driven by political agendas, and dependent on outside “experts” with no voice for the practitioners at the school level (El Amine, 2005; ALECSO, 2008; Arab Knowledge Report, 2009; MENA Report, 2008) . Moreover, the change processes followed are based on the belief that setting grand strategic plans at the regional and national level is the best way to address the challenges that Arab countries face and to promote unity and solidarity among them. Nonetheless, and in spite of major achievements in the last decades, education in the Arab countries is still far from achieving its desired ends, and is characterized by many as facing a major crisis (Chapman and Miric, 2009). The MENA development report, 2008, posits that, despite the notable quantitative expansion of education in Arab countries during the 20<sup>th</sup> century, “gaps still exist between what education systems have attained and what the region needs to achieve its current and future development”(p.1). While there is wide agreement that education in the Arab countries is still in need of major improvement, there is little clarity as to why this is the case. Some of the reasons associated with the failure of the countless attempts at reform have been attributed to the inadequacy of the process followed while planning and implementing the regional and national plans. Though the plans have addressed salient issues, they have neglected the unique needs of each country and have fallen short of developing specific strategies that account for the constraints and peculiarities of each context (Bashshur, 1982; 2010). The plans also are full of interventions from Western experiences adopted without scrutiny to their relevance to the ecological milieu of the Arab region (ALECSO, 2008; Bashshur, 2010). A recent examination of available reform plans revealed that they consist

mainly of a complex array of goals, specified in the form of long to do lists, for policy makers and school practitioners, without a clear strategic design on how they can be achieved. Moreover, most plans mandate interventions and policies that lack grounding in empirical evidence, and neglect to include specific action plans that touch on what needs to be changed at the school and classroom level. Most reform plans also miss outlining strategies for monitoring and evaluation. In addition, the improvement discourse rarely include discussions on instructional methods, approaches to school management, or any other procedural issues at the micro level of interest to the practitioner (Karami-Akkary and Rizk, 2011). Additional insight into the reasons behind the shortcomings of education reform attempts in Arab countries can be gained from the 2008 MENA region World Bank report. The report explains that current reform attempts in the Arab countries can be mapped under three dominant approaches: engineering, organizational, and public accountability. It posits that the majority of Arab countries have relied heavily on the “engineering” approach -where reform centers on government providing needed resources in the form of school buildings, pedagogical material, as well as setting selection criteria, salary scales, workload and other working conditions. This “engineering” approach has paid limited attention to organization and public accountability aspects that challenge deeply rooted practices in the pre-dominantly non-democratic Arab societies, such as: 1) taking measures toward decentralizing decision making, 2) allowing teachers, educators, parents, students, and other stakeholders to influence the formation of education objectives, policies, and resource allocation, either at the national or local levels, and 3) building human capacity through professional development (MENA Report, 2008). With the increasing complexities and demands on schools in the 21<sup>st</sup> century, the report recommends that these countries adopt a new paradigm that simultaneously tackle all three aspects of reform (MENA Report, 2009), and find ways to promote the performance, commitment and active involvement of teachers (MENA Report, 2008; Chapman and Miric,

2009). The report also recommends measures to provide enabling structures that encourage teachers to take responsibility and initiative, and build their capacity to become creative problem solvers, capable of crafting solutions based on the specific needs of the students and the school.

In the last decade, there have been an increasing number of reform initiatives in the Arab countries that are heading in this direction. Many countries have begun exploring new approaches to educational reform with more attention directed at building capacity among practitioners, and initiating reform at the level of the schools (AED, 2004, 2005; Al Sayyed, 2005; McGee 2008; RAND-Quatar, 2009). The TAMAM project is one of these new approaches. This article reports a case study of TAMAM that describes its design, discusses its assumptions and the research and theory informing its approach to implementation, and offers examples of some of the issues to be addressed to make this approach successful.

### Case Study Methodology

The focus of this case is the TAMAM project- a school based reform attempt in the Arab countries. The study constitutes the first installment in a series of research studies all aiming at developing an understanding of the TAMAM project as a new promising approach to school reform in Arab countries. It follows a case study design (Merriam, 2009; Stake, 2005) and adopts grounded theory procedures for collecting and analyzing data (Glaser and Strauss, 1967; Glaser, 1992; Charmaz, 2005, 2010). Grounded theory procedures inductively construct conceptual categories from initial field data, comparing and checking them against new field data as well as against existing conceptual literature, and integrating them together with the purpose of deriving a theoretical portrayal that emphasizes understanding rather than prediction and explanation.

The field work consisted of concurrent observation and reflections, where the researchers were “personally in contact with activities and operations of the case, reflecting and revising descriptions and meaning of what is going on” (Stake, 2005, p. 450). Data for this study was collected over a span of three years in the form of participant observant notes, open ended individual interviews with the three project initiators and with the members of the university team in charge of developing and implementing the project. Additional data was obtained from examination of the initial TAMAM project proposal, and the minutes from 30 university team planning meetings. Moreover, since the authors of this paper were both members of the project University team, the authors’ reflective journals from the first 3 years were used as an additional source of data.

Selection of participants, events to observe, and other documents to analyze followed theoretical sampling and what Stake called “opportunity to learn” (p. 452), where decisions on what information to seek next were guided by their relevance to emerging analytical understanding of the project assumptions, goals, and implementation strategies (Glaser and Strauss, 1967; Charmaz, 2010). Most data was in Arabic. Both researchers, being bilingual, translated the field notes and conducted the analysis in English. Moreover, member checks were performed regularly with all participants who were also bilingual.

The analysis of this case study combines an “intrinsic” focus and an “instrumental” one. The intrinsic aspect of the analysis consists of developing an understanding of “what is important to that case within its own world”, thus focusing on the perspectives of the participants in TAMAM as central to the constructed theoretical understanding. The instrumental aspect focuses on “illustrating how the concerns of researchers and theories are manifested in the case” (Stake, p. 450), and is achieved through a comparative analysis of the project design and processes to existing literature on effective educational reform.

The procedures of the constant comparative method as outlined by Charmaz (2005, 2010) guided the analysis of the field data and helped construct the conceptual understanding of the project design. This involved a simultaneous process of data analysis and data collection, to elaborate categories, specify their properties, define relationships between categories, and identify gaps in the collected data. Memoing has been used throughout the field work. Memoing consists of recording the “research and analytical progress” and reflecting upon those notes to determine what has been achieved and to identify the next steps to be taken in order to take the emerging theoretical categories “to higher levels of abstraction” (Charmaz, 2010, p. 94). Relevant literature was consulted at two main junctures during the study. First, prior to the field work, the literature on educational reform in the Arab world was reviewed to draw the historical context as well as identify the current attempts at reform in selected Arab countries. This helped situate the TAMAM project in the context of the past and current trends of school reform in those countries. Second, international literature on effective school reform was examined at the conclusion of the field work and was used to build the theoretical argument for the TAMAM project design.

### The TAMAM Project: An Overview

TAMAM in Arabic means “complete, finished, great” but it is actually an acronym that consists of the initials of “school-based reform” in Arabic (*al-Tatweer Al-Mustanid ila Al-Madrasa*). The TAMAM project breaks with the existing trends of school reform in the Arab World and reflects a major paradigm shift from existing top-down attempts that are far removed from the problems at the school level (Karami-Akkary and Rizk 2011; Bashshur, 2005; El Amine, 2005; Al Sayyed, 2005]. TAMAM’s most distinguished feature is the fact that its approach to school reform combines research and professional development. A team of university researchers simultaneously conduct research on the processes of school

improvement and their impact on student learning and school culture, while building individual and institutional capacity to support schools' initiatives for improvement. It is a collaborative project between a team of educational researchers at the Department of Education at the American University of Beirut (AUB) and a total of 12 schools, 9 private schools in Lebanon, Jordan and the Kingdom of Saudi Arabia, with three schools participating from each of those countries, and 3 public schools from Lebanon.

TAMAM was launched in summer of 2007. The project has received funding from a local Arab NGO that is active in promoting social development with a focus on upholding the area's Arabic cultural heritage. The project's steering committee (PSC), which consists of three professors at the AUB, oversees the ongoing development and implementation of the project. A group of representatives from local universities and ministries of education in each of the three countries support the project activities and act as liaison with their respective institutions.

The first phase of the project was completed in summer of 2010 and was dominated by initiation and capacity building activities. The research activities in this phase were mostly limited to collecting data on the progress of the implementation, and analyzing this data to monitor the progress and decide on the actions to be taken. The project is currently starting its second phase where the emphasis has shifted to helping the school teams incorporate and institutionalize what they have learned through TAMAM about their school structure and culture, explore possibilities to network with new schools in their countries, and expand the TAMAM activities to these schools. In this second phase, the school teams are expected to go, beyond collecting and analyzing data at their school, toward planning and orchestrating school wide reform. As such, the PSC development role in this phase is to enhance the teams leadership capacity, and help them acquire the skills to act as "agents of change" in their schools, to act as coaches and mentors with their peers, and to implement and ensure the long

term impact of these attempts. Research activities in the second phase will examine the intended and unintended impact of the project on the schools, while continuing to monitor the progress and to use collected data to shape the project's evolving implementation plan. For this purpose, action research is to be used, at the individual school level and at the project as a whole level, where those wanting the change are themselves doing the change, studying what they are doing, and concurrently learning as they go and change what and how they do things.

### Initiating the Project

The project was initiated by a group of three educators-two university professors and a school principal- with a long experience in school improvement in the Arab countries. The three initiators of the TAMAM project identified two concerns as their main motivation behind launching the TAMAM project:

1. *A concern about the absence of empirical research in the field of education and of a knowledge base on best educational practices that is grounded in the Arab culture and the experiences of its practitioners.* Consequently the project initiators believed in the need for generating empirical research as a vehicle to build a theoretical knowledge base on school improvement. According to them, this empirically generated knowledge base will constitute a much needed resource for a dialogue on reform that can inform policy making and help policy makers and practitioners alike go beyond setting broad top-down goals- toward specific strategies grounded in the problems faced at the school level.
2. *A concern about the quality of professional development programs available for Arab educational practitioners.* Mostly, the available professional development opportunities consisted of traditionally delivered theoretical knowledge, with a passive role for the practitioner and little opportunities to connect this theoretical knowledge to the realities and challenges of their practice. The project initiators believed in the need to promote an

experientially based model for professional development where educational practitioners would be coached to acquire new skills, while engaged in solving real life problems at their schools and in their classroom.

The TAMAM project is one of the few reform projects in the Arab world that have secured long term funding from a local non-profit Arab foundation, dedicated to social improvement. The funding NGO gave the university team a lot of flexibility in managing the grant and setting priorities, which ensured that the goals, strategies and criteria for evaluation remained grounded within the context and emerging needs of the participating schools.

#### *Setting the Goals of the TAMAM Project*

As conceived, the main purpose of the TAMAM project is to build a knowledge base for school reform- specifically its implementation processes- that is empirically grounded, responsive to the cultural peculiarities of the Arab region, and reflecting the experiences and views of the educational practitioners, especially those at the school level. Rather than look for existing reform attempts in the region and collect data on factors that hinder or enhance school change, the project initiators have opted for a different design. In this design, a team of university professors act concurrently as researchers and change agents, triggering and supporting change at the school level, through forming and training a school improvement team in each of the participating schools. Interviews with the project initiators and the PSC members, and examination of available documents reveal five central goals for the TAMAM project:

- Build capacity for inquiry, evidence based decision making and planning, professional collaboration, and leadership among the members of the participating school teams.
- Design and implement an experientially based professional development model based on research that is grounded in the cultural context of schools in the Arab World.

- Conduct research on the process as well as on the dynamics and outcome of the changes they introduce, to document best practices and develop a grounded theory of school reform.
- Influence educational policy making at the level of the school and ministries of education.
- Support professional collaboration and networking between schools and universities, within and across countries.

### *Building the TAMAM Project Teams*

Participants in the TAMAM project include teachers, administrators, university faculty, and ministry of education representatives from each of the three participating countries. This team composition is premised on the assumption that the inclusion of stakeholders with different roles and professional backgrounds, at different authority levels of the educational establishment, has the potential to enrich the professional dialogue across authority levels and professions: by allowing school practitioners to interact with educators from other schools, universities, and ministries of education from the same country, as well as teams and university faculty from the other two countries participating in the project. These participants are further teamed up as follows: a Project Steering Committee [PSC], twelve teams of school practitioners, one from each of the participating schools, representatives from local universities, and representatives from ministry of education in each of the three countries.

*The project steering committee (PSC).* A steering committee of three full time faculty members at the AUB , with specialties and professional experience pertaining to school improvement and reform, has been formed to lead and coordinate the TAMAM project. The PSC is assisted by a full time project coordinator and a group of research assistants in the department of education at AUB. The steering committee has a three folded role: 1) managing TAMAM Project's design and implementation, 2) providing professional development to participating school teams through training and coaching, and 3) conducting

research with the purpose of developing a conceptual understanding of school improvement that is grounded in the Arab cultural context.

*The participating schools' teams.* The first group of schools that were selected for participating in the Project included three private schools from each of Lebanon, Jordan, and the Kingdom of Saudi Arabia. The three countries participating in the study were selected for maximum variation in terms of the size of the country, the type of the school, the language of instruction, and the reputation of their educational system. The concern with the region's tendency to cling to tradition and reject any thing out of the "ordinary", necessitated what might be judged as an "elitist" selection process where the guiding principle was to select schools that were perceived as innovative and effective in their community, can offer easy access to the PSC team, and have educational systems with which the PSC is familiar. Innovative schools, actively pursuing school improvement, were more likely to have staff with a positive attitude toward change, and more likely to accept the changes at which TAMAM was aiming. As such, selection of these schools is more likely to maximize the project chances for success. If change was going to be successful anyplace, it would stand a better chance in such schools. Moreover, private schools were targeted first for ease of access and the higher levels of decision making authority allowed to their administrators, compared to their public school counterparts. Despite their high advocacy for the public school system in their country, the project's initiators opted to avoid the bureaucratic complications to gain access to public schools in the early stages of the project.

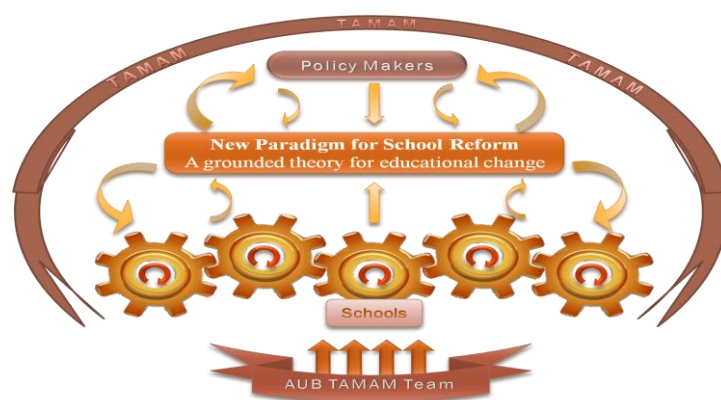
The project initiators also went with familiarity. Of the twelve schools selected, four had direct contact with the university professors and had done work with them prior to their participation. In Lebanon, some consideration was also given to the sectarian denomination of the schools. Other selection criteria included: 1) the school follows the national curriculum, has a majority of Arab personnel, 2) is ready to facilitate research and

development activities for the school's team members and outside project personnel, 3) good access by the schools to financial and other resources needed to support "improvement", 4) school administration willing to support new ideas and innovations, and 5) school structure that is relatively responsive to emerging needs.

Once the schools were identified, they were invited to join the project. Each school was asked to be represented by a team of 4-5 members, and was given the freedom to choose the members of their team. As a result, the composition of the teams varied among schools. For some schools, the school principal was a member on the team; other teams were composed only of teachers; others combined classroom teachers with teachers holding supervisory functions. In the majority of the schools, the principals selected the team members and chose them from among their most qualified and experienced teachers who demonstrated leadership potential. Being selected for the team was considered by the teachers a moral reward and a testimony of their "privilege" position in the eyes of their administration. All school team members, regardless of the composition of the team, had the full support of their school administration. Because of the project association with the AUB , both school administration and school teams considered it a "privilege" to become part of the project, and were motivated by the prospects that they will be getting much needed training from a renowned university in the area. Although the main stated purpose of the project is research and development, the main interest of most schools was initially the development and the training they were going to receive from the PSC at AUB.

*The support teams.* Each TAMAM country team included representatives from local university and ministry of education. The university representative of each country served as a resource for the respective team in their country, providing additional guidance and support to the school teams whenever needed, in coordination with the AUB team. Including representatives from local university was intended to communicate the acquired knowledge,

from the project practices and its research findings, to teachers' preparation programs and their faculty at those universities. The Ministry of Education representative in each country was expected to act as an observer and a liaison between the project and the ministry of education. During the first phase of the project, members of the support team attended all the training workshops and some of the PSC planning meetings. Specifically, the Ministry representative facilitated communication between the project and the Ministry and kept the ministry informed about project activities. The project as designed did not have a built in strategic plan on how to connect the learning from the TAMAM experience to policy makers. Including the Ministry of Education representative from each country participating in the project constituted the only connecting line. The level of involvement among those representatives varied and ranged from being observers, to acting as a liaison, to becoming a major advocate for the project at the ministry level. The goal of involving the ministry and university representatives in the project activities was to transfer through these representatives the learning from the project and its approach, with the hope of impacting educational policy making, thus bridging the divide between the practitioners, academics and policy makers. (See figure 1).



*Figure 1: The TAMAM Project*

## Implementation Design of the TAMAM Project

### *Developing the Project Strategies and activities*

After setting the initial goals and forming the school teams, the PSC began the implementation of the project. Activities consisted of determining the needs of the school teams, conducting a series of skill building workshops, providing ongoing support through regular follow up visits to the schools, and monitoring and documenting the unfolding process of the project planning and implementation. The workshops provided training on conducting collaborative action research, reflective practice, evidence-based planning and decision making, and leadership for school improvement.

The PSC team members described their project design as evolving, pointing out that decisions regarding the sequence and the choice of the activities, performed during the implementation, were determined through a process of ongoing data collection and analysis of the school teams progress, thus tracking the challenges faced as well as the lessons learned. This ongoing process of data collection and analysis guided the university team planning and implementation decisions and shaped the evolving design of the project.

*Selecting the school projects.* The implementation phase began with asking each of the school teams to choose an innovative project to examine at their school. The teams were then challenged to provide evidence of the chosen project effectiveness. The school teams “innovative projects” ranged from “cooperative learning”, to “inquiry based project learning”, to “program to build leadership among female students”, to “computerized system for ranking and rating students’ performance”. Since none of the nine school teams had considered evaluating the impact of those innovations and lacked the necessary skills to do it, this challenge motivated the school teams to examine the effectiveness of their interventions.

*Training on collaborative action research.* The school teams were trained on collaborative action research as a vehicle to provide them with a range of attitudes and

competencies, namely: solving problems through inquiry, continuously reflecting on their practice, engaging in professional dialogue, becoming comfortable with de-privatizing their practice, developing skills for systematic documentation of experiences, and setting evidence based plans for action. The steering committee members stated that their ultimate goal goes beyond equipping the school team members with inquiry skills. They believed that they are helping the participating practitioners change their ‘habits of mind’, liberating them from the mentality of learned passivity to become active learners and knowledge producers, thus expanding their view of their role, and empowering them with the knowledge and motivation needed to take action and initiate school improvement.

Collaborative action research was thus presented as the main tool toward achieving these objectives. Consequently, school teams were first coached on collaborative action research skills: asking research questions, developing tools for data collection, analyzing and interpreting data, developing action plans, and reporting the research experience to their school community. Each one of the schools used these skills to evaluate, through action research, the impact of their chosen project. While conducting their action research, the school teams were introduced to reflective practice, and were provided with multiple opportunities to experience reflection on practice through engaging in: 1) “reflective dialogue” with the other participating teams, 2) reflecting on their individual learning and progress, 3) reflecting on the effectiveness of the training program itself, and 4) observing the PSC team model reflection on the way they designed and managed the project. The team was then introduced to a conception of leadership as a capacity beyond a certain position of power, where acquired expertise and knowledge become sources of empowerment that enables practitioners to “act” as leaders and initiate change. Finally, evidence based decision making was introduced as a tool for effective improvement, and the teams were asked to build plans for action that are based and rationalized by the findings from their research data.

All through three years of training, the school teams were encouraged to document their experiences by writing reflective journals, organizing the data they collected and finally writing a report on their experience that can be shared within their school and with other schools. Moreover, the school teams were often invited to engage in reflective dialogue on the professional development process itself, and began to construct their own views about the change process in which they were involved. At the conclusion of the three years of training, a set of principles were derived from this on-going dialogue and became known among the project participants as “the TAMAM pillars.”

At the conclusion, of the first three years of the project, these pillars became the founding blocks of the implementation process of the project as well as shaped a shared vision of the school culture that TAMAM was trying to promote. All team members began to view school improvement as linked to building a school culture rooted in inquiry where decisions are informed with “evidence”, and practitioners adopt inquiry as an integral part of their practice; thus becoming reflective practitioners willing to: de-privatize their practice, engage in dialogue to find creative solutions to their problems, and lead their schools in an on-going process of learning and improvement.

*Using experiential and mentoring approaches.* The PSC team professional development activities were based on the belief that adults learn best through a combination of experiential activities and mentoring. All the building capacity activities were designed around the tenets of experiential learning. Teams selected their own innovative projects, made decisions on how to collect and interpret their data, and then designed action plans to implement the insights that emerged from their research. Throughout all training activities, the PSC members acted as mentors using their expertise to offer continuous guidance. Moreover, they examined critically the schools’ progress on their projects, challenged the decisions the teams were making along the way, and then offered them the support they

needed to sharpen their understanding and resolve the problems they were facing. These were achieved through on going individual visits between workshops. The school teams received additional support from the support team in their own countries, through individual and all-team discussion meetings of issues facing these schools. In addition, school team members had access to a website that included workshop material and an electronic forum for discussing issues related to the project. They used electronic communication extensively with the PSC members.

*Conducting Action Research toward theory development.* In addition to building the school teams' capacity for school improvement, the PSC team engaged themselves in action research throughout the implementation. Action research served two purposes: to inform the evolving design of the project, and to accumulate empirical data as a basis to construct a grounded theoretical understanding of the school improvement process. On one hand, data was collected through regular visits to the schools to gain more understanding on the progress of the participants, and to identify the challenges and successes they are facing. Those visits and the AUB team meetings that followed became the basis for the on-going process of designing, assessing and re-designing next steps. As in action research, this understanding was used to take action and make decisions on what came next in the process of capacity building: what training to give, what aspects should be followed up on, and what challenge should be resolved. On the other hand, this data, in addition to the PCS participant observant data, journal notes, and memos, were collected throughout the three years of phase 1 of the project to form the core of a data base for further research.

### Theoretical Foundation of the TAMAM Project

The TAMAM model of educational reform is rooted in four fundamental ideas: 1) The individual school and its teachers are the locus of effective educational reform; 2)

empowering teachers at the school level and developing their capacity for critical reflection and inquiry is a powerful tool towards school improvement; 3) Professional development should be grounded in the experience of the teachers, and teachers need the right balance of challenge and support to grow professionally, and 4) School improvement is a collective endeavor that requires contributions from people with diverse sources of expertise, such as university professors, policy makers, and school practitioners. All four ideas can be substantiated by theoretical and empirical Western research literature on best practices that trigger school improvement. The following section elaborates on each idea as it relates to that literature.

### *Schools and Teachers as the Locus of Educational Reform*

The main goal of TAMAM is to empower practitioners at the school level to play an active role in initiating, planning and implementing school improvement and contributing their voice to the policy making process in their schools and their country. Teachers themselves identify instructional and school practices they believe to be in need of improvement or change. They work in collaborative teams on studying the identified concern, designing and implementing strategies to improve their practice, and documenting and communicating the lessons learned to decision makers. There is a widespread agreement in Western literature that to be effective, educational reform needs to shift authority to the school level (Hallinger, 2003; Mehta, 2010) and keep the focus on improving the teaching and learning core (Fullan 1993; Sergiovanni, 2005; Seashore Louis, Toole, and Hargreaves, 1999; Darling- Hammond, 1994; Darling-Hammond, Chung Wei, Andree, Richardson, and Orphanos, 2009; Bashshur, 2005). Since the 1980s, many reform projects became centered around improving what teachers do and around expanding their role, to encompass contributions to curricular and systemic decisions (Murphy and Datnow, 2003). Many educational researchers acknowledged the importance of an active teachers' role in inducing

change in the classroom and the school, and supported the notion of a bottom-up change in schools acted out by teachers, since they are the ones to be most directly involved in the process of teaching and learning (e.g. Darling-Hammond and Mc-Laughlin, 1995; Harris and Young, 2000; Harris and Lambert, 2003; Little, 1993; Louis, Kruse and Raywid, 1996). Fullan (1993, 2003, 2005, 2007) argued that effective school reform requires that the prevalent top-down approaches connect with bottom-up initiatives generated at the school level. Therefore, it is necessary that teachers are viewed as professionals and that they are provided with the supportive systemic conditions and offered the training needed to build their capacity to successfully play this new role. Empowering teachers and supporting them as professionals are thus key factors for successful school reform (Quellmalz, Shields and Knapp, 1995; Hargreaves, 2005, 2007; Shields, Knapp, and Wechsler, 1995; Shields and Knapp, 2007). Schon (1983) argues that as professionals, teachers have unique expertise, knowledge and “wisdom of practice” that need to be valued as much if not more than the theoretical knowledge generated by educational researchers. According to Schon (1983), teachers should act as “researchers of their practice context,” setting goals, solving problems and making decisions. They are well positioned within the school system to reflect on their daily experiences, understand the demands of their school context, continuously acquire new learning, and take actions to improve their practice. Attention to and support of these processes become fundamental to building the capacity of those teachers as competent professionals capable of learning and improving their practice (Schon, 1983). On the other hand, there is wide agreement that increasing teacher’s involvement in decision making is another key condition associated with increasing teachers’ positive attitude and their effective contributions to school improvement (Quellmalz et. al, 1995; Conley and Goldman, 1998). Researchers found that reform initiatives are less likely to succeed unless teachers are encouraged to participate in making decisions in areas that are especially important to them

(Conley, 1991). Several studies have reported a positive impact on improving the teaching quality and students learning, when involving teachers in various school decisions, whether curricular (e.g. Haberman, 1992; Kirk,1988; Xu, 2010) or more systemic ones that are related to whole school improvement (e.g. Copland, 2003; Harris and Young, 2000). Moreover, teachers' participation in decision making is believed to result in building a sense of ownership, boosting the teacher's commitment to the actions in which they engage (Korostoff, Beck, and Gibb, 1998). Barth (2001) emphasized that when allowed to assume leadership roles, teachers feel empowered and are more likely to become active learners. Accordingly, preparing teachers to lead is key to the success of school improvement (Barth, 2001), and for ensuring its sustainability (Harris and Young, 2000; Harris and Lambert, 2003).

More recently, new conceptions of school leadership as distributed (Spillane, Halverson and Diamond, 2001; Spillane and Hunt, 2010; Harris and Lambert, 2003) brought more attention to the leadership role teachers can play in their schools. Distributive models of leadership takes the idea of participation in decision making, from an opportunity for teachers to contribute to leading the school, to an expectation that teachers engage continuously in leadership acts. When leadership is distributed, it resides, not solely in the individual at the top, but at every level and in every person who, in one way or another, acts as a leader. Through viewing the capacity to lead to be inherent in people, as they interact together and react to their surrounding conditions, the view of the teacher as a professional expands to encompass leadership competencies and an active role in driving improvement initiatives at their schools (Harris and Lambert, 2003; Spillane et al. 2001; Copeland, 2003). Hence, one way to improve schools, is to develop a new understanding of leadership, whereby the authority for improving teaching and learning is no longer exclusive to those "up the chain" of the administrative hierarchy, but is rather distributed horizontally to involve all teachers in

the decision-making process (Copland, 2003). Pavlou (2004) claims that “schools improve by harnessing the leadership qualities of all teachers and staff in the school” (p. 6). In addition, Harris and Drake (1997) found that a traditional view of leadership, as tied up to a power structure, acted as a barrier to reform efforts. The current paradigm of schools as learning communities (DuFour and Eaker, 1998; Senge, 1990; Senge, Cambron-McCabe, Lucas, Smith, Dutton, and Kleiner, 2000) sees schools as populated with professionals capable of holding a systemic view of their schools, who can build a shared vision, work collaboratively, engage in dialogue, and have personal mastery in their area of expertise. The literature on school reform in the West is moving in the direction of advocating for re-defining the role of teachers, building schools that support their continuous professional development and expecting those teachers to be reflective practitioners, initiators of their own professional development as well as active contributors to their school improvement (Darling-Hammond, 1994, Darling-Hammond, et al., 2009).

Consequently, adopting a school based approach to school reform in the context of Arab countries align with the prevalent need to professionalize teaching and to build systemic capacity in the schools, a capacity that would support an increased participation of school practitioners in the school improvement activities as well as provide the necessary conditions for those teachers to grow continuously.

#### *Teacher Empowerment as a Tool towards School Improvement*

Empowering teachers at the school level through developing their capacity for critical reflection and inquiry is a powerful tool towards school improvement. In TAMAM, collaborative action research is used as the main activity to develop the school teams’ capacity to become agents for change in their schools. Each school team chooses an innovative project at their school and conduct action research to evaluate its impact on student learning. In the process, they are coached by a team of University professors to build

their inquiry skills, to work collaboratively, to use evidence as the basis of their decisions, and to become reflective practitioners. Moreover, engaging in research on their practice is considered a venue through which they build their expertise in that particular area of their practice, and hence become ready to act as leaders initiating and sustaining improvement in their schools. Darling-Hammond (1994) and Darling-Hammond, et al. (2009) argued that new demands on schools resulted in needing teachers who are “infinitely skilled”. Lambert (2003), considers “skillfulness” the basis on which broad based participation in leadership can be achieved. Therefore, while action research in TAMAM is targeted toward building the capacity of individual school practitioners, it is also used to build professional collaborative teams whose role go beyond the classroom to create the conditions that incite all members of their school community to take leadership actions toward school improvement .

In the west, action research is widely viewed as a vehicle for “developing effective professional practice” (Greenwood, and Levin, 2007, p.77). It is broadly defined as a process of systematic inquiry which involves practitioners (teachers and other stakeholders) in studying and reflecting on their own practices in order to produce positive change in their schools (Gall, Gall and Borg, 2007; Cano, 2004; Gillies, 2009; Mitchell, Reilly and Logue; 2008; Savoie-Zajc and Descamps-Bednarz, 2007). The essence of action research is that it supports the ongoing professional development of practitioners, and positions all stakeholders involved as learners, rather than experts. Practitioners-researchers choose issues to investigate, which pertain to their everyday teaching and learning, are within their sphere of influence, and about which they care deeply. The main objective of conducting action research is, thus, to identify problems of practice and to seek systematic solutions to these problems in order to take action (Rearick, 1998). There are different types of action research. Individual action research is one where practitioners engage action research as a form of inquiry that leads them to what Argyris and Schon (1974, 1978) call “reflective practice”,

where practitioners become “conscious” of their actions and enabled to improve them. .

Another type of action research is collaborative action research, where many practitioners work together, not only toward improving their practice, but also toward organizational development of their particular school. One type of collaborative action research is “participatory action research” where “the researcher contributes to the practitioner world and the practitioner become involved and contributes to the research” (Greenwood and Levine, 2007, p.77). Consequently, action research has been used as a tool for teacher-driven professional development (Harris and Drake, 1997; Glickman, Gordon, and Ross-Gordon, 2007; McNiff, 2002), whether pre-service, beginning or veteran teachers (e.g. Ax, Ponte and Brouwer, 2008; Mitchell, et al., 2008; Vogrinc and Zuljan, 2009), with the goal of helping those teachers become more autonomous, active learners, and reflective practitioners (Kang, 2007; Bustingorry, 2008). The implicit assumption behind the interest in action research as a tool for teacher professional development is that it can contribute indirectly to school improvement.

Collaborative action research (Carr and Kemmis, 1986; Kemmis and McTaggart, 2005, Calhoun, 2002; Brydon-Miller and Maguire, 2009) that TAMAM adopts goes a step further. It promotes investigations involving teams of several stakeholders (teachers, administrators...) who are directly targeting school reform through seeking changes in: 1) “what people do, how they interact with the world and with others [both at behavior level], and 2) what people mean and what they value, and the discourse in which people understand and interpret the world [their mental models]” (Kemmis and McTaggart, p.565). The fundamental idea behind this approach is that by bringing people together, they will learn from each other’s experiences while studying their own situations. (Kemmis and McTaggart, 2005; Brydon-Miller and Maguire, 2009). It also rests on the assumption that people who hold goals, beliefs and visions, which are constructed from the “ground-up”, can work more

efficiently and harmoniously towards achieving improved performance (Clausen, Aquino and Wideman, 2008; Sagor, 1997, 2005). Accordingly, collaborative action research becomes action for social change, shifting the goal from an individual to a collaborative one, intentionally aiming at organizational development and deep structural change (Brydon-Miller and Maguire, 2009). In fact, Hallinger (2003) advances that “the collaborative processes inherent to the inquiry approach to school improvement offer the opportunity for teachers to study, to learn about, to share and enact leadership” (p.240).

*An Approach to Professional Development Grounded in the Experience of Teachers*

Professional development [PD] activities in TAMAM included conducting a series of workshops, over a period of three years with on-going follow up visits, where the PSC provided training and mentoring, in response to the needs of the school teams as they were progressing with their action research project. All the training activities were centered on the principles of experiential learning, and mentoring through challenge and support. Moreover, the design and the content of the professional development activities emerged in response to the needs of the school team members and the challenges they faced during the implementation of the project activities. Reflective practice was promoted in all those activities and school team members were continuously probed to engage individually, as well as a team, in critical reflection. Those PD practices are very much aligned with the widely accepted views in the Western literature on ways adult learn and on effective approaches to professional development.

According to the literature, adult learners are autonomous, socially responsible thinkers (Mezirow, 1997) and capable of self-directed learning (Knowles, 1973). Current models of adult learning (see Merriam, 2001 for a full review) focus on the socio-cultural context in which learning occurs, and view learning to be inherently embedded in the immediate milieu of practice of the learner (Knowles, 1973). Adults learn best through

“action learning”, through interaction with their colleagues and the situational factors they encounter in their work as they engage in problem solving (Argyris and Schon, 1974, 1978). According to Kolb (1984), there are two dimensions to the learning process. The first dimension represents the concrete experiencing of events at one end and abstract conceptualization at the other. The other dimension has active experimentation at one extreme and reflective observation at the other. Thus, in the process of learning, one moves in varying degrees from actor to observer and from specific involvement to general analytic detachment (p.30-31).

Mezirow (1997) suggested that critical reflection is central to adult transformative learning, which he defines as the process of inducing change in one’s viewpoints and habits of mind. This critical reflection is an understanding of the historical reasons for one’s needs, wants, and interests. Mezirow (1981, as cited in Merriam, 2001) considered “such self-knowledge a prerequisite for autonomy in self-directed learning” (p. 27) and called on adult educators to take that into consideration.

There is ample evidence that the old view of professional development that is characterized by a prescriptive approach to teacher’s training and that neglects the input of teacher as adult learner, rarely takes into account the context of teaching and the experiences of teachers. With this old view of professional development, decontextualized packages of knowledge, distributed to teachers in bits-sized pieces, have generally failed to induce considerable change in students’ learning and teachers’ ways of teaching (Darling-Hammond and McLaughlin, 1995; Darling-Hammond et al., 2009; Lieberman, 1995; Little, 1993; Knowles, 1973). Consequently, new approaches at building capacity adopt a professional development model that seeks to create opportunities for action learning and critical reflection where teachers build their own understanding about content, pedagogy and student learning (Newmann, King and Young, 2000; Darling–Hammond and McLaughlin, 1995).

This form of ongoing teacher learning is found to be best achieved in an environment that supports teachers working collaboratively with each other and with experienced mentors on planning, implementing and evaluating their action plans (Harris and Young, 2000). Mentors present those practitioners with challenging situations while at the same time offering them the support they need to resolve them (Glickman, et al., 2007). Adult educators need to offer continuous support and ongoing professional development in order to achieve sustainable school improvement. Glickman et al. (2007) advocates adopting a developmental approach for adult learners that is built around determining the needs, predispositions and the conditions surrounding these adult learners. This should be all taken into account while designing the content as well as determining the approach followed in the training. Moreover, researchers (e.g. Little, 1993) agree that an effective professional development program needs to be built around an inquiry and problem solving paradigm that is centered around knowledge production. Rather than viewing teaching as a set of acquired technical skills, teaching is viewed as a profession where there is ample room for invention and for the building of craft knowledge (Lieberman, 1995).

#### *School Improvement as a Collective Endeavour*

TAMAM is designed around the assumption that effective school reform in the Arab countries necessitates an active and collaborative contribution from all stakeholders, both at the school and at the central government level. In TAMAM, teams are formed where all levels of the decision making hierarchy are represented, connecting classroom teachers to policy makers at the Ministries of Education. All through the project, a group of teachers, school administrators, university professors, and university representatives participate in collaborative inquiry, reflective dialogue as they plan, implement and evaluate their strategies for improving their schools. As school team members and university researchers reach evidence based conclusions on the problems faced at the school level and the actions to be

taken to address the identified problems, formal educational leaders provide the needed support to see that the proposed plans for action are implemented and incorporated in the school functioning. Fullan (1993, 2003, 2005) notes that for school reform to be successful both bottom-up and top-down strategies are needed. According to him, school change is a complex process that should not be left to “experts” alone; rather, every member of the organization should act as an agent of change, hence making it possible to address concurrently many aspects of the school functioning in order to reach the “breakthrough” that is needed (Fullan and Hargreaves, 1996). In addition, many scholars concluded that bridging the gap between the policy making process and the knowledge base available on best educational practices is a necessary condition for effective school reform (McLaughlin, 1990, 1998; Fullan, 1993, 2003, 2005; Fullan and Hargreaves, 1996; Mehta 2010). Moreover, there has been a growing awareness that schools need to go beyond focusing on the teaching and learning core toward an examination of the school organization as the context within which schooling takes place. Thus, for reform to be successful, we must look at all these parts together, while paying special attention to their manifestations in the school culture as a whole (Seller, 2001). The underlying assumption of this position is aligned with a conception of the school as social system that consists of integrated and mutually interdependent sub-units and functions and that is open to influences from the surrounding political, social, and cultural environment where it is located (Owens and Valesky, 2010; Hoy and Miskel, 2008). Within this system, policy makers, school administrators, university scholars, and school teachers play different roles where they develop their own perspective on what needs to be improved and how to do it. As part of this interconnected system, it becomes crucial that those stakeholders unify their views, set shared goals, synchronize their efforts, and build their capacity to support all improvement efforts, irrespective of where those efforts are initiated (Stringer, 2009).

Moreover, effective school change requires the active involvement and commitment of the school community (Shields, et al., 1995). There is growing consensus in the literature (e.g. Fullan, 2001; Sarason, 1996 as reviewed in Harris, 2001) to suggest that major changes at the school level are bound to fail if the school doesn't create the conditions and opportunities (i.e. build the school's capacity) to implement those changes. A school's capacity is viewed as the school's potential ability to sustain its high performance with respect to teachers' ability to teach and students' ability to learn (Hoyle, Samek, Valois, 2008; Stringer 2009). According to Louis, Kruse and Raywid (1996), even when individual teachers are full of new reform ideas, their efforts for change can be deflected by the unchanging practices of their institution. Because of this, researchers call for rethinking the underlying assumptions and values that guide the school's practices, as well as transforming the structural and institutional arrangements to promote on-going teacher learning (Darling-Hammond and Mc-Laughlin, 1995). Accordingly, Kemmis and McTaggart (2005) argued that changing these practices involved a social process whereby people reframe and change their practices through interactions with others. For them, "when one party changes its behavior the others are forced to respond to that change... [Therefore] the willing and committed involvement of those whose interactions constitute the practice is necessary, in the end, to sustain and legitimate the change" (p. 563). Hargreaves (2007) added that sustainable school improvement is achieved by broadening the base for participation through distributing leadership widely and wisely rather than keeping the responsibility centralized and under government control. Hence, building the school's capacity necessitates far-reaching interventions to transform the school culture into "communities of practice" (Sergiovanni, 2000). Sergiovanni (2000) contends that developing communities of practice for teachers to reflect and share collaboratively their craft knowledge is critical to school development, and

implies that the school is actually creating the requisite conditions and opportunities for the collective staff to work and learn together.

TAMAM is indeed grounded in a conception of change that is “systemic” and “adaptive” and that “involves the fundamental alteration of core beliefs or values and the loss of accustomed ways, and possibly even identity, in an effort to alter phenomena that cannot always be precisely defined and for which the solutions and the means to address them are usually ambiguous.” (Murphy ,2008, p.2188)

### What Would it Take to Implement TAMAM Successfully?

Gall, Gall and Borg (2007) and Sagor (1997, 2005) have identified several conditions that are necessary for action research to be a positive force for educational reform. These conditions include the following: 1) Practitioners and researchers must have consensus regarding the research focus and must share common cultural perceptions, 2) carrying out a successful action research project requires adequate time, 3) participants in action research must feel that change is within their collective power, while recognizing the leadership as supportive and committed to their vision; 4) researchers must be willing to share their findings with other stakeholders and people in the education communities. While the TAMAM project, as designed, seems to consider those factors, the cultural context of Arab schools makes successful implementation highly dependent on giving special attention to the following four issues: 1) securing the support of school leaders to incorporate the goals and visions of TAMAM in the school; 2) allowing time to build capacity for sustainability; 3) . Empower and support school teams to help them feel that change and improvement is within their collective power; and 4) focus on re-culturing through assuming a learning stance during the project implementation.

### *Secure the Support of Schools Leaders*

One key challenge to the successful implementation of TAMAM in the participating schools is to receive the commitment of the school formal leaders. There is wide agreement in literature about the centrality of the principal role as a transformative leader in the school (Greenfield,2004; Leithwood, and Jantzi, 2000, 2005; Hallinger, 2003). By design, the TAMAM project secured the commitment of the school principals [all schools voluntarily participated] and invited those principals to participate in any capacity they choose both, in the activities of the project as well as in providing support to facilitate the work of the school's team members. However, all those principals still operate within a leadership paradigm dominated by an authoritarian, top-down, directive, managerial model (Akkary, 2011) rather than adopting a transformational (Leithwood and Jantzi, 2000, Hallinger 2003), developmental (Glickman, et al., 2007; Gronn, 2000 ; Day, Harris, and Hadfield, 2001) and distributed leadership (Spillane, et al., 2001; Lambert, 2003; Lambert, Walker, Zimmerman, Cooper, Lambert, Gardner, and Szabo, 2002), currently associated in the international literature with effective school reform. Thus, to be successful in providing the needed support, school leaders need to acknowledge the need to reframe their role responsibilities and their priorities as leaders, in order to support the development of a professional and empowered teaching force, ready to participate in instructional decision making. Thus, by embracing reflective practice and inquiry as a vehicle for collective critical evaluation, and by adopting a developmental approach to leading (Sergiovanni, 2001), principals will create the conditions that will allow teachers to develop into self-directed learners and independent professionals.

Moreover, school leaders can play a key role in institutionalizing the practices, skills and beliefs that the TAMAM project introduced. In fact, after completing the capacity building activities, each of the schools ended up with a team that had acquired unique skills [inquiry, reflection, collaboration, and leadership], special expertise in the particular focus

area they worked on during their action research activities, becoming thus ready to participate in leading their school improvement. However, if those newly formed teams are to succeed in their new role, school principals need to formally assign leadership roles to these teams and grant them the authority they need to implement the action plans they developed by the conclusion of their action research, and to incorporate what they learned from their TAMAM experience into the school structure as well as its teaching and learning core.

*Allow time to build capacity for sustainable improvement*

TAMAM approach to school reform aims at change in the school culture. Such change takes time and will be resisted (Sergiovanni, 2001). Many researchers pointed to this issue and asserted that changes in the culture of the school require time, and need to be seen as an unfolding journey shaped by the existing and emerging conditions in the school as it implements new views and behaviors (Fullan, 1993, 1999, 2003, 2005; McLaughlin, 1990, 1998). Time is the essential ingredient in any reform and its function is to provide opportunities to accommodate, adjust, and adapt the school organizational structure and practices to the attempted change. El Amine (2005) stated that “designing the transformation of systems is a theoretical matter; applying this transformation, however, is altogether something else. It is related to how change is “digested” by groups in which particular traditions have been anchored for a long period of time” (p. 43). Moreover, Shields and Knapp (1997) found that schools that made progress towards improving learning opportunities for students are those that did not tackle everything at once, but aimed for more modest goals and allowed for changes to take place on a longer time line than other schools. Fullan (1993, 2003) contends that effective change should start with small projects focused on salient issues yet conducted at the peripheral of the school system, then gradually progress to expand to more central functions of the organization. Despite the prevalence of these views on effective change, the complexity of the process by which these changes work their way

into the daily lives of administrators and practitioners is often underestimated by practitioners who are under a sense of urgency to improve schools. Thus, it is crucial for schools participating in TAMAM to secure long term commitment to improvement initiatives, as well as help their teams to view change as a transformative journey that unfolds and need to be tackled patiently. Hallinger, Leithwood and Murphy (1993) point at the strategic importance of daily decisions and invite us to “think big by thinking small”. According to them, paying attention to the strategic potential of ordinary actions provides the opportunity to interconnect daily practice to large goals. Problem finding and understanding of the contextual factors at play becomes even more important than problem solving (p.17). Thus schools participating in the TAMAM project need to identify few key challenges to focus on and tackle them in ways that allow for new learning [reflective practice, inquiry, collaboration] to infiltrate and transform their daily practices.

#### *Empower and support school teams*

Empowering and supporting school teams aims at helping them feel that change and improvement is within their collective power. One of the main challenges of the TAMAM project is to break the cycle of dependency, and change the patterns of learned passivity that dominates the highly bureaucratized and paternalistic organizational culture of the schools in that region. Bashshur (2005) criticized the prevailing approach to reform in the Arab countries for considering the practitioners within the educational system as workers serving that system, and suggested that future reform strategies should start looking at the system as “a servant” to the educational practitioners so that they, too, become servants to the classroom (p. 296).

In fact, within the prevailing school culture, school team members act as “dependents” on all those that they consider to be “experts”, which include academics, their administrative superiors, and policy makers, to tell them what they need to do. As a result,

expecting school team members, especially the teachers among them, to assume the role of inquirer, with the expertise to make judgment on what problems to address and what actions to take, is a big leap from the confines of the current role they are playing. Therefore, in order for TAMAM to succeed, it is critical that both PSC, in its role as the mentor/coach, and the school administrator purposefully work on helping teachers become self-directed learners and on fostering the school team member sense of self-efficacy. TAMAM is addressing this issue through building the capacity of those teachers with inquiry skills. However, more emphasis is needed on building their leadership capacity through connecting their acquired expertise to their new role as change agents within their school. With action research as the focal activity, one venue is to provide the school practitioners with the needed skills, not only to collect data from the field, but also to seek critically and independently the available international literature for documented best practices. In a heavily “oral culture” most school practitioners disconnect from accessing the literature, once they graduate from college and complete their teaching credentials, not realizing that they can seek knowledge directly and continuously without the help of University experts to become life-long independent learners. In addition, changes in the working conditions around the school are needed to give the teachers the time and the mentoring support they need to convince them that change is within their collective power (Call, Call and Walter, 2005; Sagor, 1997, 2005). Fullan (1993) notes that in order for school reform to be successful, the organization must be restructured in a way that enables and supports the actions of the people as they work on improving their practice. Fullan (1993) believes the reformed (or restructured) organizations “need to be structured as learning communities in which both the people and the organization are supported in their continuing growth towards increasingly effective practice for the benefit of the students.” (p.257). Thus, in order to empower their teachers, and build among them a sense of self efficacy, participating schools need to work on improving communication, empowering their staff

with new responsibilities, and building some measures of flexibility in their structures away from the rigid bureaucratic rules, while making on-going professional development a central aspect of the school functioning.

*Focus on re-culturing through assuming a learning stance during the project implementation*

*“You can’t teach anything to others that you haven’t become yourself”- Mother Theresa.* Working toward re-culturing the school necessitates an across the board focus on the value of learning. The successful implementation of TAMAM requires that all the stakeholders involved in the project be open to change, and adopt a learner attitude, where school leaders, teachers and university professors actively participate to transform the educational system into collaborative communities of learners. In this community, no one is the sole expert, or the only leader, or the “complete” professional. Rather, each and every one is a learner in a journey of inquiry, discovery and continuous growth. The skills that the TAMAM project is introducing, namely reflection, inquiry, collaboration, deprivatization of practice, and evidence based planning and decision making, can form new habits of mind that enhance learning as the basis for building broad based leadership capacity for skillful participation (Lambert, 2003; Lambert et al. 2002). This poses a major challenge, especially on those expected to lead in a paternalistic society still holding strongly to the model of the “complete leader”, the loner super hero. Within this view, defensiveness to adopting a learning attitude is likely to emerge, first to avoid failure and the embarrassment of not living up to expectations, and second, from the habits of dependency that avoid taking responsibility. Argyris (2001, 2008) addresses a similar challenge faced in the West, pointing at the difficulty “smart people”, especially those in key leadership positions, face to overcome their fear of failure, to embrace their mistakes and to learn from them. He warns that those “smart” people that lead others toward success can become the very reason behind the failure of their teams or organizations, because of their resistance to learn. To overcome

that barrier, Argyris (2001) proposes to go beyond “single loop learning” and engage in “second loop learning” (p.9). According to him, single loop learning occurs when people identify problems and find solutions for them, while “second loop learning”-which he calls “genuine” learning- takes place when people take an extra step and reflect on the way they think, by examining the assumptions behind their actions. Accordingly, university professors as well as school principals in TAMAM need to assume an added responsibility- that of reflecting and critically examining their own thinking and actions. For Argyris (2001), this examination is where learning how to learn takes place, leading to deeper “more textured” understanding, thus laying the foundation for sustainable improvement (p.15). Therefore, as the university professors in TAMAM are coaching the school teams to become reflective and collaborative, it becomes adamant that they model this position in their actions. For that, university professors in TAMAM need to engage in self-examination, putting their reasoning for scrutiny by all stakeholders in the TAMAM community. Most importantly, they need to demonstrate to those they are coaching their willingness to admit mistakes and to take actions that reflect new learning.

It will take commitment and courage from all to make this shift toward identifying and taking responsibility for one’s own mistakes, taking risks in experimenting with innovative views, and critically evaluating actions and goals in order to break old patterns of behavior. If TAMAM is to succeed in re-culturing the schools, it needs to help school practitioners to critically examine their current conceptions of effective leading, teaching, learning and professional development, as well as help them reframe those conceptions in a way that aligns with the vision of schools as professional communities of practice.

#### A Concluding Note

Mehta (2010) argues that for reform to be sustainable, the existing relationship/chain between research policy and practice need to be “fundamentally changed”/reversed/ re-

conceptualized. Instead of going in the direction of research informs policy and policy mandates practice (the R&D model that dominated reform in the West), he proposes “inverting that pyramid” suggesting that “practice needs to drive the process, the research will take place in schools, the role of policy would be to provide the needed support.” (p.8). Then the process/chain will run from practice to research to policy rather than from research to policy to practice. However, despite the similarity, TAMAM’s design and conceptualization takes this model a step further going beyond inverting the pyramid toward suggesting a multi-directional fluid symbiotic change process of mutual influence among those three components. Practitioners at the school level are viewed to be active participants- as “professionals” - whose participation has equal value as the university scholar or the policy maker. Within that frame, whether reform and innovation are initiated at the school level, the policy making level, or the university research level, become less of the issue. Rather, any creative/relevant innovative initiative regardless of where it is coming from [university, ministry or schools] is welcomed and all three groups [teachers, policy makers, scholars] work collaboratively in investing their resources, sharing equal responsibility to achieve the intended goals of that improvement.

Two key features of this project are particularly promising. First, the TAMAM model focuses on building capacity at all levels [schools, universities, and policy makers]. At the school level, it fosters a professionalization of the teacher workforce, helping teachers become reflective and adopt a critical and inquiry-oriented perspective toward their practice. This professionalization of teaching will ultimately lead itself into re-culturing the school into a self-renewing professional learning community (Kruse and Louis, 1993; DuFour and Eaker, 1998; Senge, 1990; Senge, et al., 2000) Moreover, through engaging in action research and continuous reflection on their practice, university professors and ministry representatives participating in the project are “learning through action” and having the opportunity to

challenge deeply held beliefs and practices on what constitute effective reform, the strategies to implement it successfully, and the kind of schools and educational professionals they want to nurture. In fact, all TAMAM team members describe what they are doing as “spreading the TAMAM culture.” This awareness of addressing the cultural dimension resonates with the recommendations in the Western literature on school reform arguing for the salience of attending to the collectively held habits, beliefs and conceptions, if attempts at initiating school reform and maintaining its impact over extended periods of time are to succeed (Argyris, 2001; Sergiovanni, 2005; Seashore Louis, et al., 1999; Fullan, 1993, 2003, 2005).

Second, the TAMAM model brings research to the center of school reform, not only as a tool to build capacity, but also as a tool for knowledge production that is grounded in practice and the contextual and cultural realities of schools. In fact, through training the school teams on action research, TAMAM is building capacity for research beyond the confines of universities, engaging practitioners in the process of knowledge production as problem solvers for home grown solutions (Eden, and Huxham, 1996). Consequently school practitioners will gain a pro-active voice in the research activities in their countries, keeping that research agenda focused on issues of practice rather than on the disconcerted choices guided by the agendas of the traditional academic researcher.

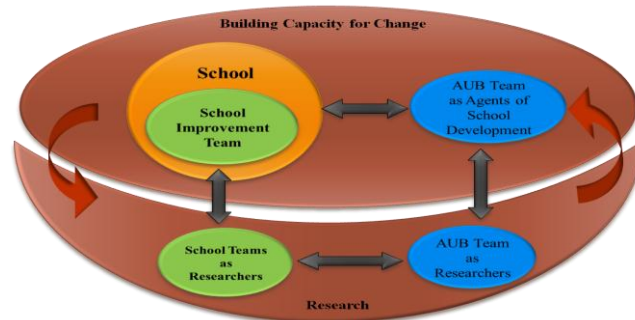


Figure 2: The TAMAM project research development model

On the other hand, TAMAM imbeds research right into the process of school improvement. Unlike the case of traditional research, where research is sent for publication hoping that its results will trickle to affect practice, the use is made of the research results right away. The same people who did the original research are supposed to take action immediately, translating their insights into practice. Through observing what happens and reflecting on it, they continuously adapt and re-organize their actions on what to do next and how to do it, as a response to the emerging needs of the school teams.

As such, TAMAM activities hold the promise to empower schools and to drive school reform through: relocating expertise by building capacity at the level of the school entities (teachers and principals alike), activating and synergizing resources (teachers, principals, ministry representatives, university representatives, scholars...), building capacity for internal as well as external agency for change (Lambert, 2003; Lambert et al. 2002) redefining expertise in research, reframing professional development as an on-going professional learning at all levels of the educational system, and last but not least continuously connecting research, practice and policy making.

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