



How do Mathematics Teachers Jointly
Build Professional Capital in School:
The Perspective of Teachers and
Department Heads

Dr. Adva Mayzel

Head, Science Department, Amit Makif Dati High School
Be'er Sheva

July 2018



How do Mathematics Teachers Jointly Build Professional Capital in School: The Perspective of Teachers and Department Heads



At the request of the Trump Foundation, I held discussions with teaching staffs and mathematics department heads in five secondary schools in Israel. I carried out visits and conducted interviews in order to thoroughly understand how teachers jointly build a shared competence in teaching a subject area within their schools.

At the core of these meetings, I saw before my eyes a model of a “learning community of professionals” which began to develop and spread in education systems around the world and in Israel too, initially by region and district, and today, more and more inside the schools themselves.

I tried to examine, through what we know about the subject from research, what modifications are made by the schools in Israel and what needs arise from the field in order for the school-based communities of teachers to plant roots and become an integral part of how the school works.

Main insights and recommendations

1. **Department heads.** The department head is the central key to building a community. The role of department head comes with a salary supplement (8% remuneration for additional responsibility) and occasionally also extra hours within the position scope (though usually not more than one hour). The head is chosen by the school management and many times, the role is not actually defined.

It is recommended that a tender be issued to all relevant teachers for the department head position. The tender would include the job description, the qualifications required and the compensation, in the same way that they are included in other systems when describing management and department head positions. Transparency in a tender of this type is also a kind of contract in which the expectations and requirements are clear to both sides. When these are defined at the outset, changes can be made as needed.

It is very important for the department head to undergo a systematic process of training and to participate in ongoing professional development in, for example, a community of department heads.

So as to encourage transition to a community model, teaching staff and department heads that meet regularly can be compensated; clear goals must be defined and shared by the management, and demonstrate various indicators of progress toward the goals defined. Today, a department head who meets these criteria receives the same remuneration as one who takes care of administrative tasks only. These circumstances create a situation in which only a department head with very strong internal motivation can inspire the teaching staff and lead to the development of a community.

External motivation in the form of compensation (for example, another teaching hour in the schedule devoted to leading the community) can also help. And, it is obvious that this compensation is justified – department heads who lead a community devote many more hours of work to leading the staff and the subject area.

2. **The enabling role of regularity.** A learning community of professionals can only exist with clear and enabling regularity that consists of time and place. It is overwhelmingly and unequivocally clear that a 45-minute meeting is insufficient. It is recommended that regular weekly meetings of the community, of 1.5 hours or even longer, take place during the morning hours when everyone is fresh and focused, and not at the end of the day.

It is recommended that the community meet in a permanent space – ideally, a space which also includes place for storage, computers and any other equipment the community needs.

In order to efficiently utilize the time during the meeting, it is recommended that technology aids be used so as to extend the staff's time beyond this slot. For example, use of email or a WhatsApp group for transmitting messages, online questionnaires for decision making, shared folders in which to save files, etc.

Another time-saving strategy for meetings is to divide the responsibility for administrative tasks among the staff members so that during the meeting itself, only questions relating to the topics under discussion are brought up.

It is recommended that the staff be divided into sub-teams sharing a common denominator (the work time of the sub-teams should also be coordinated and scheduled in advance). In large schools, it is recommended that the staff be assigned to clusters according to grade (this can, naturally, vary from year to year so that all the teachers will experience teaching the different grades).

3. **Tools for work.** Even when the department head meets all the requirements and holds regular meetings, sometimes a community just does not take root. The department heads I met with presented various dilemmas and issues related to leadership without a figurehead or advisor.

In order to properly address this issue, it is recommended that communities of department heads be created – some are already in operation in several places around the country. Professional development in these communities will focus on team-leading tools located on the emotional-social axis and on the professional axis. In a community of department heads, the participants would be able to raise personal dilemmas, share initiatives, successes, and challenges, etc. Receiving the department head position can be conditioned on participation in this kind of community.

In large schools, the community of department heads can even be built up within the school itself and concentrate on leadership-related tools.

It is recommended that the management staff at schools also become familiar with the community model so that the discourse with the department head can be based on a shared language. For this purpose, each year, the community will need to determine its goals and indicators for success and share them with the management staff so that everyone can be a partner to its aims and provide assistance when needed.