



Virtual Communication and Organization for Promoting Quality Leadership and Open Government in Schools

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Abstract

This paper shows a piece of research in which parents, students, teachers and educational supervisors' opinions about virtual management and open government at schools are analyzed. Nowadays virtual communication through computers or mobile digital devices is a common activity developed by any citizen. In this current Information and Communication Society context, school communities need institutional support based on interactive tools that are operative in this digital context. Parents should be informed and participate constantly about the progress of their children but they also must be involved in the knowledge of tasks, exercises and activities that are performed in the classroom and school. Through a quantitative and qualitative methodology we analyze educational communities' opinions about main virtual tools to improve communication, administrative tasks, and academic activities in order to enhance educational institutions quality. We have reached remarkable results, such as: school organization, communication among all members of school communities, educational programming, along with teaching functions can be significantly improved with the use of institutional interactive networks that include communicative functions and school management in a virtualized way. Digital communication and management of the school through networks makes educational communities (families, teachers and students) to be integrated in a more productive and beneficial way at the school. It is remarkable parents' feelings of being integrated in a true community in which they can participate through different communication channels. They consider themselves as active members of the educational institution where they can participate in its functioning through polls, surveys and monitor their children educational progress from an active parents' role.

Keywords: Networking, School communities, School organization, Virtual communication, Collaborative virtual environments.

INTRODUCTION

The new forms of school organization are betting on the introduction of corporate management networks to enable and enhance virtualized school organization and teaching functions (Minocha, 2009; Archambault, et al., 2010). Functions mainly enhanced are: administrative tasks, communication, teaching programming, information to families and active participation of all members of educational communities (Murray, 2008; Vázquez-Cano, 2013). Social computing transforms the way individuals process and interact with information, rendering a much more dynamic and mobile information domain centered on individual participants who interact with it through a wide variety of devices. The need for





organizations to learn and to innovate rapidly is a consistent theme in approaches to novel organizational forms (Fulk and DeSanctis, 1995; Vázquez-Cano, 2013). It seems that hierarchies are being replaced by communication and influence relationships (Reich, 1991), resulting in more flexible organizational forms that rely on peer-to-peer collaboration the achieving of their objectives. We develop a research in which we analyze the assessment by different sectors of the educational community about the functionality of these new management tools and virtualized communication in improving educational quality and relationships in schools. The history of virtual schooling and virtual school studies are important facets for understanding virtual school communications. In order to understand the best practices for communication, qualitative and quantitative analysis must be used to evaluate the nature of a variety of communication practices. The establishment of best practices for virtual communications is essential due to the rapid growth of mobiles devices and software applied to virtual communication. Without uniform standards for communications and other aspects of educational effectiveness, virtual relationships among the different members of educational communities will not be able to conform to the expectations that new schools need to achieve in this e-society. A new information infrastructure is emerging whereby citizens, industry, schools and government will communicate with each other in new ways and will fully employ open data.

The advances of technology have changed the ways communities communicate. From the 1990s, computers have allowed bringing together people who did not necessarily know each other before meeting online (Rheingold, 2002). The terms used in exploring the new forms of communities include: virtual community (Wellman, 1997), computer-supported social networks (Wellman and Gulia, 1999), computer-mediated communication (CMC) groups (Wilson and Whitelock, 1998; Blanchard and Markus, 2004), online community (Preece and Maloney-Krichmar, 2003), communities in cyberspace (Kollock and Smith, 1999). From these principles, the concept of community was challenged and re-defined, as "virtual communities" and defined as: "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (Rheingold, 1993; Wenger, 1999; Lieblein, 2000).

In line with the rise of online networks, the Internet is argued to have broadened the notion of the community from physical, co-located groups towards collectives that are able to transcend time and space (Castells, 2001; Jones, 2004; Churchill, 2009). Whereas prior studies have mainly adopted the concept of virtual community, some scholars refer to online communities instead (Preece, 2000). In general, communities could be understood as "self-organizing groups of individuals organized around a perceived need to satisfy a shared interest or set of interests by cooperating" (Baker and Ward, 2002, 211). Wenger (1999) notes that: "participation in social communities shapes our experience, and it also shapes those communities, the transformative potential goes both ways". A self-organization is formed when actors have the capacity to act and make choices, which creates social structures that enable





and constrain action. In communication processes and management of teaching duties, technological tools are an invaluable resource and help to monitor the functional capacity of teachers in the performance of their pedagogical and curricular functions.

The school is shaped as a heterogeneous group of people where participation appears as one of the dynamics needed to assign the name of community. For developing a real community there must be interaction. Interactive educational networks support teaching duties from the perspective of a participatory and collaborative community. The Universal Declaration of Human Rights (1948) recognizes in its Article 27.1 that: *Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.*

This participation appears not as a technological fashion but as a social and pedagogical need. Nowadays to carry out this school model in this e-society, it is eminently necessary to implement participatory structures in which all members work together, participate and feel active members of the school community. Developing school communities is a necessary goal but difficult to achieve if we are not able to integrate effective channels to promote active participation. Technological tools arise as a resource that helps to make effective and quality networked school community, especially when these tools are embedded in contextualized plans developed according to reality of education in schools, families and teachers. We also need a set of commitments, without which the driving actions of participation would be meaningless, they would be doomed to failure, among those principles we would include:

- The common interest of its members.
- Availability for teamwork or simultaneous collaboration.
- Assume energizing principles.
- Define the input phases to avoid dispersion.
- Promote opportunities for spontaneous reorganization of the flow of information.

There are four attributes of online communities: policies, purposes, people, and software; these attributes are grouped under two concepts: sociability and usability. Despite the contested nature of these two concepts (Preece and Maloney-Krichmar, 2003), there is agreement that people in online communities are engaging in persistent conversations and interactions in online information spaces. Therefore, ICTs can play an important role in these communities for fostering educational participation and better management functions.

As online communities proliferate in the Web 2.0 environment, researchers are asking how such communities are formed, sustained, changed over time, and dissolved and are using a variety of theoretical and methodological tools to study them, seeking to understand their trajectories and dynamics (Clark, 2001; Toprakçı, 2006; Vázquez-Cano and Sevillano-García, 2013). One common feature to these





communities is that they are digitally mediated and persistent settings within which people routinely interact, constituting and reconstituting their social worlds over time. They have collective histories and as participants interact in them, shaping participants' behaviors and interactions. Another common feature to all online communities is a reliance on sophisticated technical infrastructures both as sites for interaction and as means of access for participants.

METHOD

The case study was carried out during 2012 in a hundred schools in the province of Toledo (Spain) with different socio-cultural and economic context with the characteristics outlined in Table 1:

Table 1.

Sample data

	<i>Primary Schools</i>	<i>High-Schools</i>	<i>Private- concert Primary Schools</i>	<i>Private- concert High-Schools</i>	<i>Private Schools</i>	<i>Total</i>
<i>City</i>	20	25	10	10	5	70
<i>Rural</i>	20	10	0	0	0	30
<i>Sample</i>	95	169	45	45	66	
Total (Students+teachers+Families+Administrators) 420						

The study covers a wide range of tasks of different nature, to be resolved effectively, and its development has required the use of various methods: quantitative and qualitative; whereas both are complementary and can benefit from each other (Reichardt and Cook, 1997). Our study uses the case study as strategy, since as noted by Biddle and Anderson (1989) "suggest predictions that can be used for other teaching contexts we have not examined, make explicit the assumptions with which we face events and provide tools that can be used to address and understand the confusing phenomena of teaching".

For data collection, questionnaires, ethnographic interview, and participant observation have been used on one side and on the other hand, monitoring the operation and content of the social network as an active participant. These techniques have an important complementary value, as the interview can understand and grasp what an informant thinks and believes, how he/she interprets his/her world and what meanings they use and manage. By contrast, the observation allows us to precisely access the content; i.e. the actions of the informants as they occur in their natural context of action. According to Kemmis and McTaggart (1988) we consider that the observation serves to document the effects of critically informed action and seeks to achieve a reliable basis for reflection. The data provided in questionnaire were analyzed using version 19 of the SPSS statistical software package. First of all, the questionnaire's statistical guarantees were studied. The item-total correlation of the dimension was analyzed in order to eliminate those items with a correlation coefficient of below 0.3. Also, the reliability of the scale was analyzed using the Cronbach's Alpha Test (.851).





Participant observation has been developed by the supervisor monitoring the functioning of social networks and the visit to the school and the classroom. In this way, he/she can provide guidance, make appropriate recommendations or requirements necessary for the teachers and families. It can also help to promote good teaching practices in improving the quality of education at schools. We used a questionnaire to guide the interviews. Several authors of ethnographic research highlight the importance of the questionnaire, as Woods (1986), indicating its relevance as a means to gather information for larger samples than those obtained through personal interviews or individualized sources. Also Kemmis and McTaggart (1988) referred to in that school communities can improve what they do, by the findings of the questionnaire data that will enable appropriate treatment and reflections. The questionnaire focuses on three areas:

Area 1: Monitoring and execution of teaching functions with ICT support.

Area 2: Digital communication among all members of the educational community.

Area 3: Advice, guidance, participation and information with ICT to various sectors of the educational community.

Data from the various monitoring techniques are triangulated in order to increase the validity of the results of the study by purification of the inherent shortcomings of a single method of data collection and control of the supervisor's personal bias.

RESULTS AND DISCUSSION

The results obtained in the statistical analysis applied to the questionnaire attest to its internal consistency and construct validity. None of the items were eliminated as a result of low discriminatory power or low correlation with the dimension as a whole. Bartlett's test of sphericity ($p=.000$) and the Kaiser-Mayer-Olkin sampling adequacy measure (.781) were found to be suitable when analyzing the factorial structure of the scale using the Varimax with Kaiser Normalization method for the principal component analysis. Tables 2 and 3 show matrix of factors and factors with incidence in accordance with teaching functions, digital communication, advice, guidance, and communication.





Table 2.

Matrix of Factors Extracted by Varimax Rotation and Factor Loadings of Items

Item	F1 (TF)	2 (DC)	3 (AD)	4 (GUI)	5 (PAR)
Virtual Classroom	.854	.634	.567		.601
Communication of Absences		.879			
Academic Information for Families	.681		.765	.654	.583
Virtual Didactic Department	.534	.501			.501
Virtual Tutoring				.721	
Digital agenda		.790			
Electronic Assessment Information		.801	.765		
E-mail		.503			.832
Communication of absences		.678			
Virtual Tutor				.599	
Virtual Agenda			.734		
Video conferencing		.781	.765		
Virtualized tutoring and counseling to promote educational community counseling, guidance and/or virtual information			.856	.769	.891
Virtualized tutoring and counseling to develop personal and professional competences			.521	.698	
Virtualized tutoring and counseling systems in your expectations about the school			.479		.675
Virtual Classroom	.563			.825	
Communication of Absences			.581	.823	
% of variance explained = 74.59	15.34	18.73	9.34	7.32	23.86
Cronbach's alpha α	.821	.813	.712	.601	.782

Note: *p < .05. TF: Teaching Functions. DC: Digital communications. AD: Advice. GUI: Guidance. PAR: Participation

Table 3.

Differences between the means for factors with incidence in accordance with teaching functions, digital communication, advice, guidance, and communication

		F1 (TF)	2 (DC)	3 (AD)	4 (GUI)	5 (PAR)
Total	Mean	2.54	3.01	2.33	2.83	3.47
N= 420	sd	.81852	.70591	.71682	.54131	.70082
Teachers	Mean	3.12	3.22	2.85	2.99	3.01
N= 141	Sd	.89876	.92345	.78907	.50134	.60134
	Sig.	***	***	**	**	***
Students	Mean	2.54	3.97	3.09	2.82	3.12
N= 191	Sd	.81324	.92134	.77689	.59800	.67890
	Sig.	**	***	**	**	***
Parents	Mean	2.91	2.99	2.21	2.53	3.41
N= 188	Sd	.95431	.82100	.80987	.76789	.72361
	Sig.	**	***	**	**	***

Note: *p < .05, ** p < .01, *** p < .001. TF: Teaching Functions. DC: Digital communications. AD: Advice. GUI: Guidance. PAR: Participation



The principal component factor analysis identified five underlying factors in the questionnaire, with a total explained variance of 74.59%.

– *Teachers.* Teachers' opinions about virtual tools in promoting better teaching functions have a high level of reliability in "Teaching functions" (.312***), "Participation" (.301***), and "Digital Communication" (.322***). The subscale which assesses this factor has a Cronbach's alpha = .813.

– *Students.* Students consider that ICT promotes a better development of "Participation" (.312***) and "Digital Communication" (.397***). The subscale which assesses this factor has a Cronbach's alpha = .712.

– *Parents.* They consider that "Participation" (.341***) and "Digital communication" (.299***) are the main benefits of virtual tools at schools. The subscale which assesses this factor has a Cronbach's alpha = .788.

From the analysis of data, we extracted the following descriptive results with the comparison among families, teachers and supervisors (Table 4).

Table 4.

Descriptive results: Monitoring and execution of teachers' tasks with ICT support.

AREA 1: Monitoring and execution of teachers' tasks with ICT support.			
1. What action based on ICT means an improvement of teaching functions?			
	Family	Teacher	Supervisor
a) Virtual Classroom	65%	72%	90%
b) Truancyinformation	97%	90%	100%
c) Academic Information for Families	89%	79%	88%
d) Virtual Didactic Department	65%	69%	87%
e) Virtual Tutoring	71%	67%	89%
f) Digital agenda	85%	77%	93%
Electronic Assessment Information	91%	74%	99%
2. How do you rate the inclusion of ICT in teaching duties?			
a) Excellent	81%	75%	80%
b) Very good	5%	10%	9%
c) Good	4%	5%	6%
d) Regular	10%	10%	5%
e) Poor	0%	0%	0%

Table 5.

Descriptive results: Digital communication among all members of the educational community.

AREA 2: Digital communication among all members of the educational community.			
1. What action based on ICT means improved communication among members of the educational community?			
	Family	Teacher	Supervisor
a) E-mail	75%	67%	78%
b) Truancyinformation	95%	89%	100%
c) Virtual Tutor	40%	54%	78%
d) Virtual Agenda	67%	57%	69%
e) Videoconferencing	15%	5%	34%
2. How do you rate the inclusion of ICT in communication between members of the educational community?			
a) Excellent	71%	45%	75%
b) Very good	9%	15%	9%
c) Good	10%	10%	6%
d) Regular	9%	12%	6%
e) Poor	1%	18%	4%



Table 6.

Descriptive results: Advice, guidance, participation and information with ICT to various sectors of the educational community.

AREA 3a (Family): Advice, guidance, participation and information with ICT to various sectors of the educational community.						
1. Rate the use of virtualized tutoring and counseling systems in the development of educational community counseling, guidance and / or virtual information.	1 0%	2 2%	3 26%	4 21%	5 49%	6 2%
2. Rate the use of virtualized tutoring and counseling systems in the development of personal and professional competences.	1 0%	2 1%	3 19%	4 21%	5 25%	6 34%
3. Rate the use of virtualized tutoring and counseling systems in your expectations about the school.	1 0%	2 3%	3 23%	4 25%	5 38%	6 11%
AREA 3b (Teachers): Advice, guidance, participation and information with ICT to various sectors of the educational community.						
1. Rate the use of virtualized tutoring and counseling systems in the development of educational community counseling, guidance and / or virtual information.	1 8%	2 6%	3 16%	4 20%	5 30%	6 20%
2. Rate the use of virtualized tutoring and counseling systems in the development of personal and professional competences.	1 6%	2 10%	3 19%	4 21%	5 25%	6 34%
3. Rate the use of virtualized tutoring and counseling systems in your expectations about the school.	1 0%	2 3%	3 23%	4 25%	5 38%	6 11%

Results show how tools based on ICT enables the influence of parents on their children's academic performance, and it is possible an active and decisive participation in the structure and goals adopted by the school. What seems to be confirmed as a trend that we will not abandon, it is the desire of parents to broaden the content of their relations with the schools. The adoption of new tools to support communication will enable that those parents who have not traditionally participated in the school are encouraged to participate; and not only as a testimonial way, but from the principles of active and (co) management. Especially encourage a more active participation on the following profiles of parents:

- People who were never elected to any post in a school board.
- Parents who have little information on the functions of the school board.
- People with a low level of education and low income.
- People who do not share the opinion to the relevant value of school education.
- People who are very sensitive to the schooling of their children.
- People who express little or no desire to participate in matters of educational or administrative matters.

These participatory cultures can be seen in items such as those established by the *Report of the Center on Families, Communities, Schools and Children's Learning* (Coleman, 1991; Council of Chief State School Officers, 1991) from Johns Hopkins University which includes six types of collaborative school-family-community.





(Outlined in italics the contribution of technological tools in the enhancement of the items listed according to our research):

1. *Advice from school to families.* The school provides assistance to families in relation to the basic obligations of their students: a) health and safety b) supervision, discipline and guidance c) positive home conditions that support the appropriate behavior for each level. *Educational networks provide the opportunity for professionals from the school: Counseling Department, educators and tutors to create a virtual school where parents can create or participate in discussion forums, share positive experiences generated in the same context. This positive experience helps it to overcome conflict and deprivation.*
2. *School-home communication.* It is a basic obligation of the school to inform families about school programs and student progress through letters, phone calls, report cards, newsletters, parent conferences, etc. *ICTs could be considered as a powerful and interactive way to initiate and strengthen the dissemination of information that enhance these tools: mobile messages or absences appointments with the tutor, monitoring of individual pupils with virtualization of the didactic department, access to academic information through virtual classroom and discussion forums and surveys that exceed mere information to enter into the collaboration and participation as hallmarks of a school network.*
3. *School-family interaction.* Stimulus to school by parents and community volunteers, in order to help the principal and government team, faculty and students in school activities that are considered appropriate. *ICTs promote that the center serves as educational support, social and personal families and parents in the teaching-learning process. They allow the student to interact with peers and teachers, and parents are encouraged to contribute to the achievement of the ends of the school. Participation in surveys, forums and supporting the management team in programming activities. It also operates as a speaker of constructive criticism from parents and teachers to the team.*
4. *Advice from school to home learning.* Transmission of ideas from teachers to parents to supervise and assist their children at home in activities coordinated with the education received in the classroom. *Networks within departments support parents to conduct a detailed monitoring of their children in school; download activities and track the tasks that their children must performed daily.*
5. *Community participation in school governance.* Parents and other residents of the community play the role of directors and participate in making decisions based on the establishment of parent associations, advisory committees, school boards, and / or independent groups working to improve the school. *ICTs enable working families that can create virtual collaborative spaces and serve as empowerment of the educational work of the household.*



6. *Exchanges with other community institutions.* Participation in the school of any of the institutions that share some responsibility for the development of students. It includes programs for coordination between the school, and community support services to students and their families. *Virtual Learning Environments have a continuous encourage networking between the community and local entities that are related to the school, family and school. It can be started with the social projects of the local municipality.*

These results are in line with previous studies about virtual organization in schools. Previous results showed that educational community should use effective communications to decrease the transactional distance and to ensure that participants do not feel constrained by differences in location (Lowry et al., 2006; Halverson and Smith, 2010). The results of some studies have indicated that the form of communication is less important than the personal factors involved in ensuring successful communication practices in virtual schooling (Harms. et al., 2006; Young, Birtolo and McElman, 2009). What you get with these digital strategies and actions is to enhance learning through parents and their involvement in academic life and organization of schools. The education authorities of different countries are encouraging:

1. *Formal mechanisms for participation of parents in decision making in schools, including their representation on school boards.*
2. *The inclusion of parents in school programs, using formulas such as open classrooms, alternative schools, and so on.*

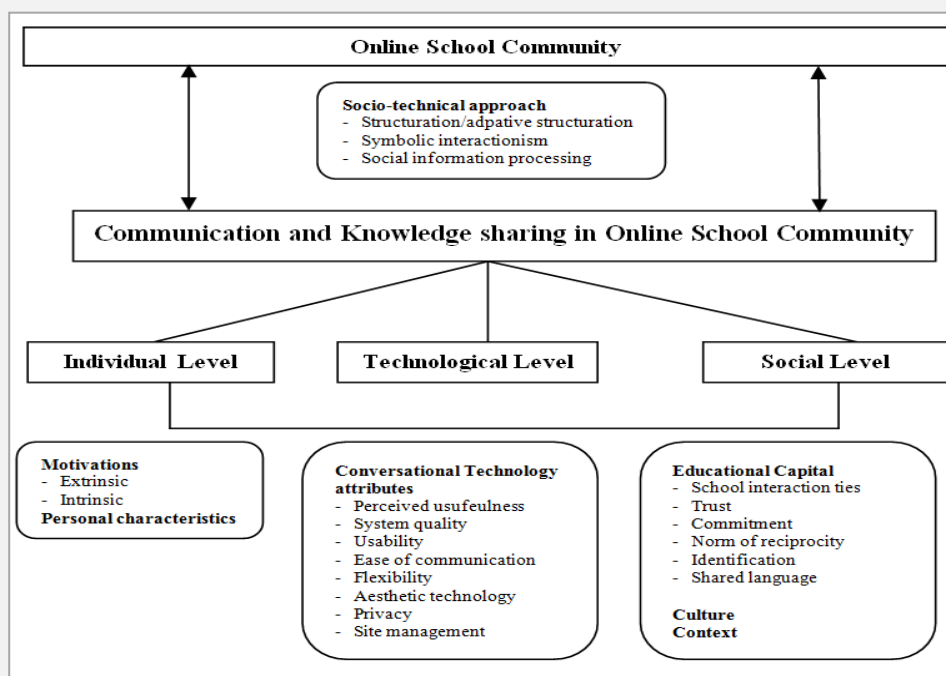


Figure 1.

Online School Communities. Digital Functions



When parents are involved in school organization, teachers show a greater interest in non-school experiences of their students and become a more positive cultural background of families, with consequent favorable to school performance; parents who are treated as partners in school organization play a decisive role in the academic and behavioral development of their children. The basic online school community model can be seen in Figure 1.

CONCLUSIONS AND SUGGESTIONS

The open-innovation paradigm implies that schools need to open themselves up to the array of resources available beyond their boundaries, and to apply both internal and external knowledge. Social computing networks have opened an exciting new dimension to the schools. Virtualized communications at schools by teachers, members of the management team and family is a system that minimizes the time and integrates all members of the educational community in schools' life.

Schools should implement and foster virtual communications in order to integrate all members of the educational community. ICT should be integrated in order to save time and energy in the development of school organization and academic management of schools. To keep up to date parents on the status of tasks, exams, absences, tests and exercises of their children. To allow to see information about the school or their children through the digital bulletin board service or email alerts. To facilitate the expansion or reinforcement of academic activities at home. To encourage the creation of an interactive network in order to (co) manage the school. Thus communication among faculty, educational departments, tutors, parents and management team becomes more fluid, continuous and solvent.

Thus, it is necessary to advance in the theoretical and managerial understanding of Web 2.0 in relation to the school social communities. Online school interaction among all community members also incorporates more sophisticated forms than declarative and procedural information exchange (i.e., questions and answers), such as transactive learning (knowledge about who knows what) and developing shared mental models (Curtis and Lawson, 2001).

In sum, communication sharing in online school communities is facilitated by means of intrinsic and extrinsic motivation, personal characteristics, collective social capital, shared culture, and appropriate features of conversational technologies. Schools in this e-society need to encourage the adoption of the "social networking" principle of Web 2.0 technology. That is, taking advantage of communication channels in all the areas of school organization: administrative, communicative and in the development of the learning process, promoting team work, exchange, discussion, and negotiation of meanings. The virtual communication at schools democratizes knowledge, formation and communication to promote sustainable development by providing schools and peasant communities with new tools and new abilities which enable them to better resolve their problems, acquiring





alternative methods of life, and establish cooperation ties with others, provide a communication and remote access to schools, contributing to reduce great difference existing in urban-rural schools.

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Okullarda Kalite, Liderlik ve Açık Yönetimi Teşvik için Sanal İletişim ve Organizasyon

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Genişletilmiş Özet

Problem: Bu makalede, okullardaki sanal ve açık yönetim hakkında veliler, öğrenciler, öğretmenler ve eğitim denetçilerinin görüşleri analiz edilmiştir. Günümüzde sanal iletişim, bilgisayar veya mobil dijital cihazlar üzerinden herkes tarafından kullanılmaktadır. Mevcut Bilgi ve İletişim Toplumu bağlamında okul toplulukları da dijital ortamlarda çalışan interaktif araçlara dayalı kurumsal desteğe ihtiyaç duymaktadır. Bu yolla, ebeveynler çocuklarının gelişimi hakkında sürekli bilgilendirilebilmekte ve okuldaki aktivitelerden haberdar olabilmekte ve okul ve sınıf ortamında gerçekleştirilen görevler, alıştırmalar ve diğer aktivitelere bu yolla dâhil olabilmektedirler.

Yöntem: Bu çalışmada nicel ve nitel veri toplamak suretiyle, eğitim kurumlarının kalitesini geliştirmeye yönelik iletişim, idari görevler ve akademik aktiviteleri iyileştirmek için kullanılacak temel sanal araçlar hakkında eğitim toplumlarının fikirleri analiz edilmiştir. Bu alan çalışması, farklı sosyo-kültürel ve ekonomik bağlamı ile Toledo (İspanya) ilindeki yüz okulda 2012 boyunca yürütülmüştür. Veri toplama için, bir yandan anket, etnografik görüşme ve katılımcı gözlem kullanılırken diğer yandan aktif bir katılımcı olarak sosyal ağ içeriğini ve operasyonu gözleme kullanılmıştır. Bu teknikler birbirini tamamlayıcı işleve sahiptir.

Bulgular: Çalışmanın sonucunda anlaşılmıştır ki; okul örgütü ve okul toplumu arasındaki dijital iletişim yani okul yönetiminin interaktif ağı kullanması, eğitim-öğretim programlarının kalitesine katkı sağlamaktadır. Dijital iletişim ve ağlar yoluyla okul yönetimi eğitim topluluklarını (aileler, öğretmenler ve öğrenciler) okul için daha verimli ve yararlı hale getirmektedir. Farklı iletişim kanallarından okuldaki topluluğa ulaşabilmek ve bu yolla uyum sağlamak ebeveynlerin duygularına olumlu yansımaktadır. Onlar kendilerini eğitim kurumunun aktif üyeleri olarak değerlendirmekte ve anketler, araştırmalar yoluyla işlevsel olmakta ve aktif bir ebeveyn olarak çocuklarının eğitimsel ilerlemelerini izleyebilmektedirler.

Öneriler: Okullar eğitim topluluğunun tüm üyelerini sürece dahil edebilmek için sanal iletişimi uygulamalı ve beslemelidir. Okul örgütünün geliştirilmesi ve akademik okul yönetiminde zaman ve enerji tasarrufu için BİT okula entegre





edilmelidir. Bu yolla, görevler, sınavlar, devamsızlıklar, testler ve çocuklarının egzersiz durumuyla ilgili bilgiler güncel tutulabilir. Dijital bülten veya e-posta mesajları aracılığıyla okul veya çocukları hakkında bilgi sahibi olmalarına izin verilebilir. Evde akademik faaliyetlerin artırılması veya takviye edilmesi kolaylaştırılabilir. Okulu yönetmek için interaktif bir ağın oluşturulması gerçekleştirilebilir. Böylece okul ve ilgilileri sürekli iletişimde olmak suretiyle sorun çözücü hale gelebilir.

Anahtar Kelimeler: Ağ, Okul toplulukları, Okul örgütü, Sanal iletişim, İşbirlikçi sanal ortamlar.

