

# Bridging among Ethnic Communities by Cross-cultural Communities of Practice

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**Abstract.** The integration of immigrants is a big challenge for western societies. In this paper we describe how to bridge between ethnically defined communities by means of computer-supported project work. Our approach is grounded in socio-cultural theories of learning, especially Community of Practice (CoP). To evaluate our approach, we have built up a computer club in a multi cultural neighbourhood of the city of Bonn. Parents and children of mainly German and Turkish origin work jointly to create multimedia artefacts. These artefacts represent aspects of the neighbourhood's recent history. The paper describes the project and its theoretical background. We also provide empirical findings to evaluate our approach.

## Introduction

Germany and other modern western societies are facing the migration from countries with distinctly different socio-cultural backgrounds. Democratically constituted states should encourage social participation of all of their inhabitants, since this is a necessary condition for a sufficient level of integration. The lack of social as well as cultural integration seems to lead to unequal opportunities and lower levels of education which are specifically problematic for migrants of the second and third generation.

Looking at modern western societies, we see integration processes such as of migrants often running into problematical conditions or even failing. In this paper we will focus on the Turkish immigrant community in Germany. Although it exists for more than forty years in Germany, this community is still poorly

integrated. When starting with primary school migrant children of the third generation often show, for instance, significant deficits in German language abilities compared to other pupils of the same age. Their language abilities seem to be often even lower than those of their parents who were also brought up in Germany (second generation). Moreover, the social gap between the Turkish immigrant community and the mainstream society seems to be widening recently due to an unequal access to computer infrastructures (digital divide).

In this paper we will present our approach of linking ethnical communities by means of computer-supported project work. In the following we will present some basic concepts dealing with the social integration of migrants and provide some basic facts about the German situation. A survey on computer-based approaches towards social integration comes next. We will then present our concept of the intercultural computer club. Based on socio-cultural theories of learning, we try to establish computer-related Communities of Practice (CoPs) as a bridge between ethnically defined communities. To evaluate our approach, we present empirical findings from the first eight months of the computer club's existence.

## Integration Discourse

The scientific and political discourse on the integration of migrants involves concepts which are interpreted differently from person to person, from institution to institution, and from community to community. What do the concepts of acculturation and integration mean, and what is an appropriate level of acculturation and integration? The integration discourse offers a variety of different answers to these questions.

According to Berry (Berry 1984, 1992), acculturation must be seen as a process which begins with the immigration of an individual or a group belonging to a different culture than the dominant one in an existing society. During the process of acculturation immigrants may pass through five possible phases - from pre-contact, contact, conflict, crises, towards an adaptation phase (Roebbers, 1997: 17). The crises phase is not obligatory but may emerge if conflicts between the two cultural groups become overwhelming. Depending on the development during the process of acculturation four conceivable levels of adaptation may result: integration, assimilation, separation, and marginalization.

Berry & Kim (1988: 211) state two issues which are decisive factors with regard to attitudes toward different modes of acculturation – namely the maintenance of one's own cultural identity and the maintenance of relationships with other groups. These issues of maintaining socio-cultural values are matters of subjective decisions among immigrants and immigrant groups. If an immigrant can give affirmative answers to both issues, the integration takes place. Therefore, immigrants decide whether they want to be integrated or assimilated. In opposite to Luft (2002), it seems impossible to us to prescribe integration by order.

There are also barriers created by the mainstream society which can hinder integration and may motivate immigrants to separate themselves in autonomous immigrant communities. Integration, in our opinion, is a challenge for both parties as the shortcomings of integration are mostly grounded in behavioural patterns of exclusion and self-isolation. So, the inclusion of all involved communities within a social environment is important for the success of integrative projects. The main challenge for the integrative work is to establish additional identities besides those of the different ethnic communities. These identities could be built on shared practices.

## Ethnic Communities and Technology

Global migration seems to confirm the thesis that globalization fostered by latest media- and transportation-technologies diminishes the importance of local places. Therefore, we would end up in a global village. However, migration also stimulates intense discussions whether the integration into local context can be achieved. In particular, the concentration of ethnic minorities in urban neighbourhoods is an interesting phenomenon as it seems that the local context has a strong impact, still today.

### Ethnic Communities in Germany

Most large cities in western countries have specific neighbourhoods where primarily ethnic minorities live. In particular in the US the term “inner city” is often used as a synonym for the area where underprivileged classes - mostly ethnic communities - live. In these neighbourhoods the issues of low economical, cultural and social capital are often interrelated.

In quite some German cities, quarters with a primarily Turkish community exist. In these quarters a stabilized and more or less well-working and self-organizing community has been developed over the years. These communities formed their own identity separately from each other (Esser 1996, Unbehau et al. 1997). Similar phenomena can be found with repatriates of German ancestry emigrating from the territory of the former Soviet Union.

Particularly in areas where autonomous immigrant communities<sup>1</sup> exist, the problem of isolation can become effective and significant. This can lead to the condition that both, parents and children, acquire too little linguistic and intercultural competences to communicate with other communities.

Wedding, a quarter in Berlin with a high degree of foreigners and a high degree of unemployment, is an example for these conditions. In 2001 a study of 20 elementary schools in Wedding showed that only one fourth of the first

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<sup>1</sup> In German this phenomenon is called “Parallelgesellschaften” meaning ‘parallel societies’.

graders could speak sufficiently German. Almost half of the children showed significant deficits. In one day care centre in Wedding 80 % of the children were of non-German origin and 75 % had parents who were unemployed (Naumann, 1998). The linguistic problems seem to correlate with social problems in the quarter. The poverty in linguistic abilities of the children corresponds to their social and economic poverty (Vieth-Entus, 2001). In such a situation it is difficult for immigrants to participate in the cultural and social capital of mainstream society. Hence it will be also difficult to improve their economic situation.

## Digital Divide

The digital divide is an issue referring to the socio-economic gap between communities that have access to computers and the Internet and those who do not. In Germany only a few studies exist which investigate how migrants appropriate computers and digital media.

A study conducted for the German Government comes to the conclusion that there is a rather high agreement between children from Turkish and German families regarding their wishes and preferences toward the use of digital media (Granato, 2001). This study does neither consider the aspects of media competence nor those of the media design. It seems that immigrants have less access to new technologies than Germans (Wagner et al. 2002). In order to prevent the digital divide in the Information Society, special support for migrants may be necessary.

There are some initiatives who try to deal with these issues in the German context. The foundation "Digitale Chancen" believes that digital media offer opportunities for integration. Hinkelbein (2004, p. 27) states that the empowerment through the appropriation of new media is an important step for migrants. It will help them to express their needs and to represent themselves to gain more (political) participation.

The effects of digital media on the integration of immigrants are not always considered to be positive. Critics say that global access to media content will increase cultural segregation. For instance, it is argued that the availability of Turkish satellite TV plays a role in the deterioration of the third generation's German language abilities. Aksoy and Robins (2000) criticize such a position as too extreme and argue for a more differentiated analysis. They look upon the increasing consumption of Turkish TV channels rather as a consequence of a failed integration than a reason for the given segregation.

## Computer-based Approaches to social Integration

In the following we present some projects which try to integrate migrants by means of digital media. The focus is on projects which try to overcome the digital

divide. In general, these issues seem to be still little explored within the scientific discourse, at least in applied computer science. One of the well known approaches in dealing with this issue is the Computer Clubhouses (CCH). This approach has been developed in the specific context of US inner cities. However, it has recently been exported to many other countries and socio-economic conditions. Our work was originally inspired by observing the CCH approach.

## Computer Clubhouses

In 1993 a research group of the MIT Media Laboratory opened the first computer club aiming at teenagers from lower social classes and educational backgrounds (inner cities). The pedagogical concept can be seen as an extension to the constructivistic learning paradigm. In constructivism, learning is a process of constructing individual cognitive structures. Papert (1980) extends this idea by stating that these cognitive structures have to be put into practice by constructing artefacts. Thereby a way is found to externalize implicit and tacit knowledge. This is called constructionism (Papert 1980). There have been several approaches to focus on the collective dimension of constructionist activities. For instance, Chapman (2004) argues that the artefacts for learning are put into social context. They are shared and discussed. Other learners are also able to learn from and with these artefacts. In addition, the constructor learns from the others dealing with the artefacts. Shaw (1995) enriches this theory with a socio-cultural aspect. In his perspective constructionist learning is also social learning. Beyond the artefacts, social ties are established during the process of constructionist learning. As a result, the social capital is a part of the underlying concept of the CCH.

Highly innovative ICT is used to stimulate the learning process of the target group. In a long-term perspective, the CCH tries to improve the opportunities of its participants on the labour market (Resnick & Rusk 1996a, Resnick & Rusk 1996b). Hayes et al. (2004) demonstrate the difficulties of bringing this espoused model of the CCH into practice. They also show how it can be in conflict with the actual needs of its members.

While originally strongly influenced by this work, we focused our work rather on strengthening the links between different ethnical communities than on individual and collective learning processes which are stimulated by innovative computer tools. So far, we subordinated the development of innovative tools for learning to the needs for community building.

## Projects in the German Context

In the following we present some projects which have been developed with regard to the specific German context. Since these projects are not scientifically evaluated it is difficult to judge their success.

There are several projects which offer specific mentoring for migrants in an internet cafe type of setting. An important aspect of these approaches is the assignment of bilingual volunteers who mentor the computer-based activities of the participants. A goal is to enable self-organized learning experiences. Bilingual teachers offer, for instance, computer courses in German language and only switch if necessary into the mother tongue of the migrants. Multi-cultural project activities are not part of these computer-related activities.

However, we found project-based settings for integration in non-computer-supported settings. “Internationale Gärten” is an interesting integration-project since it asks actors of different ethnical background to share practices. In this project, asylum seekers and local citizens cultivate specific gardens together. The gardening activities were chosen since they seem to be relevant in different cultures (cf. Hinkelbein, 2004).

There are a couple of projects which make use of the increasing amount of channels of mass distribution to provide ethno-specific content to the different migrant communities in Germany. The goal of the project “Seniors: Media – Migration – Integration – Participation” is to develop multimedia material for both an internet platform and broadcasting in a local radio station. It is dedicated to elderly migrants, especially to Turkish women. The production and emission of these materials stimulate the migrant community to discover their cultural identity in a new way and to present their identity to a public audience.

Beyond this project, there exists a variety of different ethno portals in the internet. These portals are often bilingual and offer topics of interest to the different migrant communities. A specific portal tries to integrate parents of foreign children much stronger in the system of public education. These parents get information on educational issues by so called parent letters. A version of these parent letters is addressing Turkish migrant families especially, and these are partially written in Turkish.

While most of these approaches follow the goal of integration, computers and digital media can be used in rather different ways, as well. The Islamic fundamentalist organisation Milli Görüs which pursues – according to the German secret service – a segregating and fundamentalist programme is primarily a religious organisation. But it also runs sport studios and computer rooms. In this way, they present an attractive offer to teenagers of Turkish origin.

## Conceptual Considerations

When developing our action research approach for the inter-cultural computer club, we were inspired by the theories on Communities of Practice (CoP) (Lave and Wenger 1991; Wenger 1998). In our case, CoPs are an interesting theoretical concept since they relate the experience of shared practice to the process of identity building and knowledge acquisition.

In their work, Lave and Wenger follow socio-cultural learning theories which understand learning as a collective process. The learning process is linked to specific contexts of action. Learning in a CoP is defined by the relationship of *old-timers* and *newcomers* which are inside the community. By means of legitimate peripheral participation, newcomers are confronted with the practice of old-timers which built the core of a CoP. As newcomers interact, work, and communicate with old-timers their experiences increase. This phenomenon shows that learning in a CoP is a process of growing into the community. CoPs are characterized by common conventions, language, tool usage, values, and standards. A CoP is inseparable from issues of (individual and social) identity. Identity is mainly determined by negotiated experience of one's self in terms of participation in a community and the learning process concerning one's membership in a CoP (Wenger 1998, 145).

Following these theoretical considerations, our approach intends to establish a CoP bridging between the rather segregated ethnical communities. We assume that the establishment of a shared practice among members of the ethnical communities would have an impact on the actors' individual and, in a longer term perspective, on the ethnic communities' collective identity.

In collocated but segregated neighbourhoods, a shared practice typically does not exist. Therefore, interventions have to be conceptualized which support the creation of a shared practice between the ethnical communities. Such interventions need to be robust enough to overcome the existing gaps in practices and identities.

Since we do not believe in social determinism, such interventions will rather increase the likelihood of a CoP's emergence than force it into existence (cf. Wenger et al. 2002). To increase the likelihood, these interventions have to be conceptualized with regard to the specific context in a given neighbourhood. Such an intervention has to take two core issues into account (a) the selection of an appropriate domain to establish a shared practice and (b) finding attractors to overcome the gaps between the given ethnical communities.

## Local Context

We evaluated our research approach in a project which takes place in the Bonner Altstadt, a neighbourhood of the city of Bonn. The Bonner Altstadt has a population of about 10,000 inhabitants. The social and cultural structure of this district can be characterized as a colourful mixture of different communities<sup>2</sup>. However, the German and the Turkish communities are by far the biggest. Today's situation in the quarter is a result of the post war urban development. In the 60s and 70s, many better-off inhabitants moved away into the suburbs and the

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<sup>2</sup> A slogan of a local pressure group emphasizes this point clearly by proclaiming "Vielfalt Altstadt" meaning 'diversity in the old town center'.

housing conditions deteriorated. Later on, they were replaced by people searching for new and cheaper accommodation, i.e. mostly immigrants and students. Some statistical data characterize this situation today: The quarter has a high rate of immigrants (22.7% of the population, in comparison to 12.5% in Bonn as total) and a low education rate (35% have just a Hauptschulabschluss<sup>3</sup> and 32% of those in employment are workers). However, the German community consists to a considerable part out of academics, partly former students who stayed in the quarter after their graduation.

The first generation of the Turkish Altstadt community came to Germany as contracted factory labours in the 1960s and early 70s. Most of them emigrated from a rather small rural district in western Turkey. While in the beginning the men came typically by themselves, wives and children followed later on. In the beginning, working in Germany was seen by most of the families as a periodical stay. However, since the 1990s this attitude started to change and the Turkish families bought and restored old houses in the quarter.

In the German context elementary schools are important places where collocated but segregated communities meet. Most kids go to a public elementary school in their local school district. Therefore, schools in multicultural neighbourhoods face considerable challenges in dealing with a differentiated population of pupils.

Our project is conducted in cooperation with Marienschule, an elementary school in the neighbourhood. The school implements the goals, values and methods of the reform pedagogical learning paradigms of Maria Montessori. The focus lies on open and work oriented lessons, e.g. in small groups, workshops, projects, and so on. Each class room is equipped with two or three computers which can be used as resources in the daily work. For more than a decade pupils are taught in classes with mixed age-groups. Beyond the neighbourhood the school has gained reputation for its innovative pedagogies and didactical practice.

The pupils of Marienschule come from very different social and cultural circumstances. About 35% of all pupils are of Turkish origin and come from the rather low educated background of the local community. Moreover, there are a considerable number of additional children with migrant or mixed backgrounds. A considerable portion of the children of German origin comes from middle class families with an academic background.

While innovative in its didactics, Marienschule experiences a couple of serious problems in dealing with their highly differentiated pupils. Offering appropriate education to third generation children of Turkish origin turns out to be a serious challenge for a variety of reasons. A considerable part of these children starts school with little or even without German language abilities. This is particularly surprising since their parents of the second generation often speak much better

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<sup>3</sup> Hauptschulabschluss is the German equivalent to the certificate of completion of compulsory basic secondary schooling.

German. Moreover, many children of Turkish origin lack parents' support and motivation concerning their school performance. Finally, the children of the Turkish community seem to have little access to digital media. This is not only a question of the availability of computer hardware and software in their homes but also of the level of computer literacy within their families and networks of friends.

Due to these conditions the principal of Marienschule picked up on our ideas and got involved in the project.<sup>4</sup> In the following, we will present the core concepts which we developed for trying to establish a multicultural CoP.

### Shared Practice: Computer-Supported Projects

We decided to establish a shared praxis across the ethnical communities by encouraging actors to jointly work on computer-supported projects.

We assumed that dealing with computers and digital media would be attractive for many actors within the different ethnical communities. Observing the school life, we knew that children were rather motivated to use computers and had mostly gained already some experience in dealing with them. This attraction seemed to be rather general across the different communities. We assumed that parents would encourage their children to expand computer related abilities since these qualifications seemed to be socially desired even in the immigrant and non-immigrant communities. We assumed that computer abilities were perceived as being related to professional opportunities and participation in certain aspects of social life.

We needed to find project foci which were interesting to the members of the different communities and provided a base for a multi-cultural dialog. This was a difficult issue since we did not have any experience with regard to appropriate topics. Socio-cultural and ecological issues with an impact on the neighbourhood's daily life were as well discussed as the provision of support for some of the school's recurrent activities. In the course of the last eight months five different projects have been started, some consecutive others in parallel.

One of the projects deals with a multimedia documentation of family histories. Right now, already the third generation of Turkish immigrants lives in the neighbourhood. However, their family histories are only poorly documented if at all.<sup>5</sup> For instance, the experience of the first generation of immigrants who are now in their 60s and 70s are only partly remembered even in their families. These

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<sup>4</sup> Empirical investigations by Calabrese-Barton (1998) and Nasir (2002) indicate the importance of the pupils' identification with their performance in school settings. Looking at children from minority groups in inner cities in the US, they argue that school performance is often low in case schooling does not play an important role in the self-conception of the children. So schools need to take more care of the pupil's identity and try to adapt their measures accordingly.

<sup>5</sup> For instance, it does not yet exist any museum which documents the history of the post war labour immigration to Germany.

family histories should be presented together with German ones from the same neighbourhood. Such a shared history may support the growth of a joint identity across the different communities.

Supported by computers, the participants in the project get the opportunity to search for historical and social sources within their personal context. Others may learn from the resulting artefacts.

### Bridging the Gap: Social Structures and Attractors

We choose the shared practice in a way that it is meaningful and attractive for actors from the different ethnic communities. However, we believed that just offering an infrastructure for a shared practice would not be enough to start the process (cf. Rohde 2004). So we considered appropriate social structures and attractors to support the initiation of the process.

In segregated neighbourhoods there typically exist few social structures on which the establishment of a cross-cultural project can draw on. In the German context elementary schools are one of these structures. In elementary schools children of the different cultural backgrounds meet. Therefore teachers, and specifically the principals of these schools, exercise a cross-cultural impact on the pupils' families. Information distributed by them reaches the pupils' families immediately and is typically taken serious.

To impact identities in the different ethnic communities, we needed to attract parents, as well. The involvement of the parents was important to the school for educational purposes, as well. Since the success of schooling is highly related to the social context of the children, schools and parents need to work together (Lanfranchi et al., 2001). Improving the cooperation with parents, specifically from less educated backgrounds, was a major reason for the elementary school to participate in this project. Thus, we introduced the rule that children may only come to the club if accompanied by at least one adult. By this rule, we drew on the attraction computers have for children to get parents involved in the process. In addition, it is hard for elementary school kids to manage complex projects themselves. So, conceptual support of their parents is needed to realize the envisioned project outcomes. While establishing a project-related practice, we assumed that foreign and German parents would communicate with each other and started impacting their identity.

### Methodological Considerations

After a preparation period of 18 months the come\_IN computer club was opened officially in March 2004. Since its opening it is running once a week for two hours from 5pm to 7pm. The intended target groups show rather strong interest and active participation in the practice of the club. The successful start of the club

is mainly based on the work of volunteers from the neighbourhood (see also section ‘Acknowledgements’). Different donations allowed us to buy the initial hardware and software equipment: five computers, two digital cameras, a video camera, and a beamer.

## Action Research

The empirical method is based on the concept of action research. We adopted Lewin’s cyclic model of action research which includes two basic methodological principles. Firstly, action research is divided into certain sub-tasks which are characterized by specific methodological sub-routines within the researcher’s work. Secondly, action research is cyclic, i.e. the sub-routines repeat again and again after running through a full circle of the whole spiral (Holter & Schwartz-Barcott 1993). Following Kemmis & McTaggart (1988: p. 5) three sub-routines or phases are of interest: a) reflection phase, b) planning phase, and c) action and observation phase.

We follow Kemmis’ & McTaggart’s (1988) concept of participation within action research, i.e. participatory action research (PAR). In the following we will describe how we put this framework into practice. Moreover, we present how we collected and interpreted the empirical data.

The initial reflection phase was strongly oriented on Mills’ (2003) framework of action research. First, we explored the research field which included the area of action as well as problems of interest and related social factors (see section ‘The Local Context’). Related projects provided us with an overview about existing research practice and results which narrowed the range of possible research questions. Second, we developed and described possible interventions and innovations which were supposed to be put into practice. We cooperated closely with different actors from the neighbourhood, namely the principal of the school, several teachers, some parents and other who became engaged on a volunteer base. Lastly, necessary resources (e.g. room for the project, technical equipment) have been put into consideration. After the installation of the technical equipment the first planning phase was over and the initial action and observation phase could begin.

## Empirical Data

Analyzing empirical data by using predefined theories or hypotheses leads to the problem that the uniqueness of the processes cannot be captured. In order to overcome these shortcomings grounded theory develops its concepts based on the data collection, analysis, and theoretical sampling within the field (Dick 2002).

For that reason we employ the methodological ideas of grounded theory in our empirical studies. We collect field notes, conducted additional observations and enrich them by means of semi-structured interviews. By coding these empirical

materials, we are able to categorize and structure them. Further memoing (documentation of personal ideas and thoughts which are related to the notes and coding) turned out to be helpful for two reasons: a) ideas did not get lost when they are written down immediately and were helpful in later theoretical sampling, b) memoing offered the opportunity to make subjective assumptions explicit and discuss them related to the data collected.

Two of the authors were strongly involved as action researcher in the emergence of the computer club. The third author joined the project later and mainly focussed on the collection of empirical data by means of semi-structured interviews and participatory observations.

## Empirical Findings

Our empirical findings are mainly based on transcripts of club meetings, observations, field notes, and interviews. So far, five semi-structured interviews<sup>6</sup> have been conducted which deepen our understanding of certain phenomena which became obvious in the club. An interview with the principal of the school provided important insights concerning the formal structures within the school and the club.

The participation in the weekly meetings of the computer club fluctuated between 20 to 40 parents and children. Their cultural background was quite heterogeneous. While participants of German and Turkish origin represented the two biggest groups, other nationalities got involved in the club, as well (e.g. Japanese, African).

In the following, we will present selected results which are based on our experience during the first eight months of the computer club's existence.

### Importance of existing (formal) Structures

An important factor in realizing our concept was the cooperation with the elementary school. By cooperating with the school, we could draw on its access towards parents and children in the multicultural context. This access is primarily given by the formal structure of schooling institutions regulated by laws, rules, and statutes (see above), and by the special conditions in the Bonner Altstadt.

Beyond these (formal) aspects, a critical factor was the teachers' active support. In particular, the project benefited from the high engagement of the principal of the school. Due to her support, the project was announced in school meetings and letters to parents. This was important, since recommendations and

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<sup>6</sup> The interviews took between 20 and 45 minutes. They were mainly based on field notes and memos. One exception was the interview with the principal of Marienschule. This interview took about 90 minutes and was supported by a semi-structured interview guideline. This guideline was based on findings from field notes, codings and memos.

advises given by teachers are typically considered seriously by the parents. In particular through the active engagement of the principal, the parents could sense the importance given to the project by the school.

Finally, we took care of a high visibility of the project within the neighbourhood. We had a formal opening event of the computer club at which the mayor of the city of Bonn and a member of the European Parliament were speaking. Later on the computer club was visited by the State Minister of Social Affairs. All of these events were covered by the local newspapers. These events were crowded with people living in the neighbourhood. A participant commented this event: "There was some sort of commotion, when the Madame Minister and the governing mayoress were here at the Marienschule".

We assumed that this kind of publicity increased the attraction of the computer club in bridging the gap between the different ethnic communities.

To understand the motivation of the elementary school, represented by the principal, it makes sense to take a closer look at her biography. Her practical experiences seem to follow a clear policy for her career. The decision to become a teacher, for instance, was strongly influenced by her former habit to help other pupils with their homework. In addition, she used to give coaching to younger schoolfellows. That way, she said, the idea emerged to become a teacher.

Her pedagogical orientation towards the Montessori learning paradigm is motivated by the drastic decrease in the number of pupils the school experienced in the 1980s. To promote her newly introduced concept, she actively advertised it in regional kindergartens. She also got the parents involved in the process of defining the school's new identity. The search for mutual dialogue is one of the main pillars of the success in her school. Her learning process is manifested in school practice and is consequently continued in the computer club. Therefore, she actively supported the concept of mixing different ethnic groups and cross-generational learning as formal conditions within the computer club.

### Computer an Attractor for Participation

Our empirical findings indicate that working with computers is an attractor which can draw people to participate in the club. In particular, children use the computer rather playfully and it seems that they have no respect when exploring the computer. They just try out the programmes. This playfully work can be illustrated by a boy, who needed one hour to write a small text with Openoffice. But after doing that he was very proud of mastering this *challenge*: "When he'd written four lines of text, he smiled and got rosy-cheeked" (Comment from Frau Kansy). In addition, occasionally often when parents want to go home, the kids beg and say that they still want to stay "only just a moment".

The role of the parents is interesting. They provide help very readily if a child has a problem. In addition, they are willing to receive help if they are not able to solve a given problem.

But in opposite to the children, they show some sort of respect concerning computers which was also expressed in some of the interviews. This “respectfulness” can lead to a rather passive behaviour, i.e. many parents prefer to watch the club’ activities instead of working themselves on the computers. Obviously, German and Turkish parents use the computer club differently. German fathers seem to like the role of being mentors or tutors. But those Germans who do not play the role of tutors act more passively than some of the Turkish parents. Most Turkish adults in the club work rather actively with computers or alternatively participate in a computer-based German language course.

There are some parents in the club who actively use the computers to follow their personal interests and who want to acquire new knowledge purposefully e.g. handling of email programmes, shopping eBay or formatting specific types of documents.

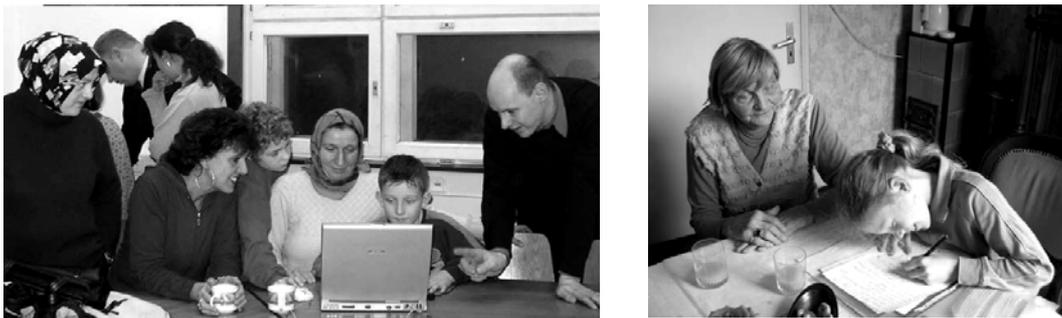


Figure 1: (Left) Turkish son proudly shows his mother his computer skills. (Right) Young girl interview habits of the quarter as a part of the history project (Picture taken from the booklet *Come\_IN* (2004)).

## Negotiated Experience and Values

In order to initiate the process, we needed to find project foci which were interesting to the members of the different generations and communities and provided a base for a multi cultural dialog. During the first eight months we explored a couple of project foci together with the participants.

The project focus “Bonner Altstadt Geschichten”, (Hi-)Stories from the Bonner Altstadt turned out to be rather successful with respect to these goals<sup>7</sup>. The underlying idea of the project is to conserve different narratives from inhabitants of the neighbourhood. On the one hand these narratives give an

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<sup>7</sup> This project group presents some of the stories in a small booklet which was sold on the Christmas market of the school (*Come\_IN*, 2004)

account of the multicultural character of the neighbourhood during the past decades. On the other hand the project results may help to strengthen a (mainly) German-Turkish identity. We assumed that those who explores the shared past collaboratively will have a common future, manifested in a common identity.

We were able to examine the people's behaviour in large projects. After the introduction of the general theme and a presentation of prototypical realizations of materials, the parents took actively part in the club for the first time. They collected creative ideas concerning the content which was to be included in the neighbourhood's digital history.

When examining the neighbourhood under different perspectives, a process of negotiation emerges. Shared as well as conflicting cultural values get visible. This fact can be illustrated by the following case.



I don't like to passing by this shop. In actual fact it is nice inside the shop/room but the windows are ugly. (I thing that an artist painted the image). I find the picture is ugly, because the painted woman on the window is nude.

Figure 2: A young girl presents one of her ugliest places of the quarter. Text and picture taken from the booklet *Come\_IN* (2004)

As a part of the history project the kids were supposed to take photos of the most beautiful and the ugliest part of the quarter. A young girl of Turkish origin took a photo of an art gallery. The shop window of the gallery was painted with some sketches of figures. Among others, the sketch of a nude woman decorated the window. When describing her photo the girl wrote that she "gets fed up with this, since there are women displayed nude in public". In contrast, others actors felt very differently about the gallery and its window since it enriches the quarter culturally.

This case shows to what extent the perspectives are different concerning certain places in the neighbourhood. We believe that the opportunities of multi media technologies can play an important role in capturing these different perspectives and present them in an adequate manner. Yet, at this stage of the project we have not yet developed explicit strategies how to make use of these artefacts in building on the differences in perspective.

## Appropriation of Computers

The empirical data shows that different patterns for the appropriation of computer applications exist. The different appropriation processes are always embedded in social networks structured by individual abilities and friendship ties. We found that, although the club has no formal structure and does not maintain a long-term practice, a grouping into newcomers (novices) and old-timers (experts) takes place. Parents with computer experience – fathers in particular – quickly take the role of mentors.

For example, one father who works for a computer company is typically willing to give advice. He also enriches the club with fresh and innovative ideas. Another example for such phenomena is a German father who comes with his 17 years old daughter to the club where both act as mentors. Their motivation is to “simply do something good within the neighbourhood. The idea [was] good, and doing [would be] much more preferable than moaning”. A Turkish father uses to haggle on eBay. He is very proud to demonstrate his practical skills in buying and selling things via the Internet. He also practices that at home, and shows new things he gathered and learnt with his friends. But, he is not interested in taking leadership.

It is also interesting to see that newcomers employ different manners of learning. A comparison between a Japanese and a Turkish mother can illustrate this very well: The Japanese mother is very enthusiastic with the club. She comes very frequently and is eager to learn more about computers. She uses the new competence also for her business (e.g. create leaflets that announce her piano concerts). Talking about her learning progress is mainly the basis for intercultural dialogue. In addition, she motivates other parents to increase their competences as she emphasizes the practical need of using computers.

The Turkish single mother comes also regularly to the club. Her son is very keen to working on computers and is one of the experts among the children. She, in contrast, was very shy at the beginning, had no computer competence and spoke only little German. During their continuous participation she became more and more self-confident, joins the language course and started to work with computers timidly but regularly. Nevertheless, she is not integrated completely since intercultural dialogue, especially among parents, is still rather infrequent.

Another specific aspect of the club is the rather intense cooperation between generations. Parents learn from their children and visa versa. The kids playfully experiment with the software. They also drive the production process of multimedia materials. They often ask adults for advice. The adults either show how to solve a certain problem or ask other mentors to find a solution.

## Making use of the high Recognition of Computer Abilities

The computer is an important factor to get the project running (see above). A closer look at the role of computer shows an interesting phenomenon: It is not the actual usefulness of the computer which is important to some of the parents, but the fact that the computer may become useful in the future. Therefore they would like their kids to acquire computer competences. Two interviewed parents interested in the computer club stated that they did not know how to handle a computer, neither did they know what ICT can do for them.

Obviously computer and the ability to deal with them offer a rather high level of social reputation. However, this reputation does not always hold. For example, in case of the German language class, the use of computers had to be stopped since the underlying software could not be applied adequately. Now German classes are exclusively conducted in the classical manner without any computer support. In order to overcome the shortcoming of actual learning applications, typically deeper requirement analyses in multi cultural settings are needed.

Although badly designed standard software is annoying, it is not that bad that we needed to stop our project due to an inadequate technical infrastructure. In particular, we believe that the decisive activities in our project do not happen by means of computer support. These activities which are secondary to the acquisition of computer skills are of primary importance for the establishment of a CoP.

## Conclusion

There are many reasons which make integration projects like the one presented above a challenge. Typically, there is neither an existing shared practice nor a common identity on which such projects can be built. Additionally most of the people involved in the project do their work voluntarily and without payment. To create a shared practice and bootstrap an integration process, it is important to choose suitable attractors and formal structures fitting to the particular socio-cultural context.

In our case, the attraction of computers to children was an important factor. Many of them got directly very enthusiastic about the computer club. Moreover, the gentle “grip” the school’s principle and other teachers exercised on parents provided formal structures which helped setting up the process. Due to this pressure, some parents felt obliged to participate in the computer club. So the structures of the German public school system and the fact that the different ethnically defined communities lived still in the same neighbourhood helped setting up the integration process.

Duguid (2004) has already pointed out that formal organizational structures such as the division of labour, are highly important for communities of practice.

They shape the space of opportunities for their emergence. Formal social structures such as public schooling may play a similar role in establishing a shared practice and initiating integration processes.

In the course of the project it turned out that the rule which stated that parents must accompany their children to the club became important in an unanticipated way. While originally invented to increase the participation of parents, it soon got a different meaning. This rule provided physical and cultural spaces especially for those women of Turkish origin who were often exclusively bound to their family homes and ethnic community.

There are considerable methodological problems with respect to the evaluation of integration processes. A successful process is difficult to measure, especially when it is ongoing. Actually, we consider the current state of the process as a success. An indicator is the rather high number of actors participating from the side of the German and the Turkish community. The active participation is relatively well measurable. However, it is unclear whether a shared practice or changes in the actor's identities will emerge. Even in case a common practice emerges, its impact on the actors identity is not a given. These changes are much more fundamental and are deeply embedded in a shared practice. Therefore, they are difficult to analyse. Changes in identity are long-term processes which run underneath the behavioural surface and are, therefore, not always obvious. We can just search for individual cases of empirical evidence. An example for such evidence is the appropriation of computers by the Turkish single mother (see above). But it is not for sure, if this is a sustainable process.

The context between the members and their ethnic community is still not evident. It is not clear if people who specially need an enrichment of their cultural and social capital could have been reached. On the contrary we do know only little about how the project reflects to the social net by the participants which makes them a multiplier.

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