



Instructions for authors, subscriptions and further details:

<http://remie.hipatiapress.com>

Bringing Funds of Family Knowledge to School. The *Living Morocco* Project (“برغملا شي علا”).

Xènia Saubich & Moisès Esteban¹

1) Department of Psychology, University of Girona, Spain

Date of publication: October 15th, 2011.

To cite this article: Saubich, X. & Esteban, M. (2011). Bringing funds of family knowledge to school. The *Living Morocco* project (“برغملا شي علا”). *Multidisciplinary Journal of Educational Research*, 1(1), 79-103.
doi: 10.4452/remie.2011.04

To link this article: <http://dx.doi.org/10.4452/remie.2011.04>

PLEASE SCROLL DOWN FOR ARTICLE

The terms and conditions of use are related to the Open Journal System and to Creative Commons publishing system.

Bringing Funds of Family Knowledge to school. The Living Morocco Project (“برغمملاشي عالاً”)

Xènia Saubich & Moisès Esteban

University of Girona

Abstract

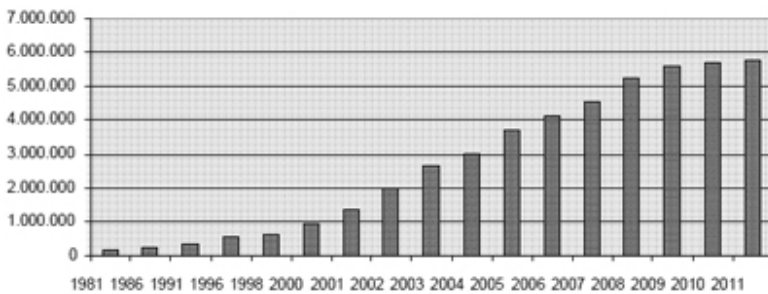
The purpose of the study, grounded in sociocultural theory, is to describe the funds of knowledge of a Moroccan family living in Catalonia (Spain) in order to document how teachers can use these funds of knowledge to make direct links between students' lives and classroom teaching. The funds of knowledge approach is based on a simple premise: regardless of any socio-economical and sociocultural “deficit” that people may or may not have all families accumulate bodies of beliefs, ideas, skills and abilities based on their experiences (in areas such as their occupation or their religion). The challenge consists in connecting these bodies of educational resources with teaching practice in order to connect the curriculum with students' lives. In doing so, qualitative research can be carried out using several techniques such as self portraits, self-definition tasks, assessment of family artefacts, documenting routines through photographs, or the analysis of a person's significant circle. The results in terms of teaching practices illustrate the variety of ways teachers can make connections between home and school in ways that assist learners in their academic development. In this article, we propose using the term funds of identity to complement the concept of funds of knowledge.

Keywords: Funds of knowledge; Funds of identity; Forms of life; Qualitative research; School-Family relationships.



The population of Spain is rapidly becoming more ethnically and culturally diverse. According to the INE (Spanish Institute of National Statistics), there were 5.7 million foreign residents in possession of a residence permit in Spain in 2011. Of these, 864,278 (15.1%) were Romanians and 769,920 (13.4%) were Moroccan. Other important foreign communities include the British (6.8%), Ecuadorian (6.3%), and Colombian (4.7%) communities (INE, 2011).

Figure 1. Evolution of foreign population in Spain from 1980 to 2011



Source: INE, First demographic estimates 2011.

Since 2000, Spain has experienced high population growth as a result of immigration flows, despite a birth rate that is only half of the replacement level. In 2005, a regularization program led to an increase of 700,000 people in the legal immigrant population. In that year Spain had the second highest immigration rates within the European Union - just behind Cyprus - and the second highest absolute net migration in the World (after the USA) (EUROSTAT, 2006). This can be explained by a number of factors including its geographical position, the porosity of its borders, the large size of its underground economy and the strength of agricultural and construction sectors that require more low-cost labour than can be found among the national workforce. In fact, during its economic boom, Spain was Europe's largest absorber of migrants from

2002 to 2007, with its immigrant population more than doubling as 2.5 million people arrived. Although the number of immigrants in Spain is, officially, smaller than that of other countries in the European Union, it is certainly large enough to be taken into consideration.

This abrupt and continuing influx of immigrants, particularly those arriving clandestinely by sea, has resulted in notable social and educational challenges because, at the same time in Spanish schools, the numbers of white, middle-class teachers (who, incidentally, are predominantly female) has remained stable. This mismatch between children's home cultures and the cultures of schools has an adverse affect on student achievement. According to the Program for International Student Assessment (OECD, 2007), a disproportionately high number of children from ethnic minorities and immigrant populations, from isolated and poor communities, perform consistently lower academically than indigenous, middle-class students. The question is: Why do children from such poor communities fail more often in school?

Obviously, there is no single and easy answer. Complex issues need complex answers. However, some researchers have detected certain discontinuities between school and family (Ballenger, 1999; Ogbu, 1982; Tharp & Gallimore, 1993). Moreover, several studies have shown how minority and working-class children can succeed in school if classrooms are reorganized in such a way as to give them the same advantages that middle-class children always seemed to have had. In other words, when educators recognize the knowledge, abilities and experiences of immigrant children and place these attributes at the heart of their schooling, these students are better motivated and obtain better results (González, Moll & Amanti, 2005; McIntyre, Rosebery & González, 2001; Moll, 2011; Moll & González, 2004). To quote Vélez-Ibáñez & Greenberg (1992), children from different home and cultural backgrounds learn different "funds of knowledge". The problem is that, usually, the various different funds of knowledge are not treated equally in school.

Bringing families' culture into school. The Funds of Knowledge project

The concept of funds of knowledge as a sociocultural framework has been used by educational researchers to better understand the educational experiences of immigrant students and their families (González, Moll &

Amanti, 2005; McIntyre, Kyle & Rightmyer, 2005; Moll, 2011). This concept was first introduced by Vélez-Ibañez and Greenberg (1992) when attempting to understand how U.S. Mexican children constructed their cultural identity. According to these researchers, one of the easiest ways to understand this concept is to think about the multiple funds that households must simultaneously acquire, make use of and manage, in order to maintain the household and individual well-being. These may be, for example, social, such as funds of friendship, or monetary, such as funds of rent (i.e., housing). As argued by Moll, Amanti, Neff and González (1992), the concept of funds of knowledge is based on the premise that people are competent and have knowledge - and that their life experiences have given them that knowledge. By “funds of knowledge” they mean: “those historically -accumulated and culturally-developed bodies of knowledge and skills essential for household or individual functioning and well-being” (Moll, Amanti, Neff & González, 1992, p. 133). In other words: “we are using the phrase funds of knowledge broadly, to mean the various social and linguistic practices and the historically -accumulated bodies of knowledge that are essential to students’ homes and communities” (McIntyre, Rosebery & González, 2001, p. 2).

In particular, in Arizona (USA), the conceptual framework of funds of knowledge has successfully documented the existence of a wealth of knowledge, skills and strategic and cultural resources and artefacts that Latino families or households contain. For example, household knowledge may include information about religion, associated with particular practices; about farming and animal management, associated with households’ rural origins, or knowledge in the field of construction, related to urban occupations. Numerous studies have used this theoretical approach to argue that when funds of knowledge are incorporated into the curriculum and teaching, they facilitate teachers’ recognition and use of family and community resources that are key sources of rigorous academic content (González, Moll & Amanti, 2005; McIntyre, Rosebery & González, 2001; McIntyre, Kyle & Rightmyer, 2005; Moll & Greenberg, 1990).

In other words, the central idea is that families, regardless of social class, ethnicity, linguistic condition or economic standing, can be characterized by the practices they have developed and the knowledge they

have acquired in living their lives. This knowledge and these skills and abilities can be treated pedagogically as cultural resources for teaching and learning in schools. Families, as educational resources, possess valuable tools for children's education (Acosta-Iriqui & Esteban, 2010). Teachers have to establish contact with the family funds of knowledge in order to incorporate them and to connect curricula to students' lives (McIntyre, Rosebery, & González, 2001). To accomplish this goal, teachers are trained in qualitative strategies in order to understand households and classrooms qualitatively. In this way, teachers can then utilize a combination of ethnographic observations, open-ended interviewing strategies, life stories and case studies to analyze the complex functions of households within their socio-historical contexts and the funds of family knowledge accumulated (Moll, Amanti, Neff & González, 1992).

To connect school culture and practices and family backgrounds through funds of knowledge is a strategy for developing innovations in teaching that draw upon the knowledge and skills found in local households. In particular, the ethnographic analysis of household dynamics, the examination of classroom practices and the development of after-school study groups with teachers are qualitative strategies for connecting classroom practices and family funds of knowledge (Moll, Amanti, Neff & González, 1992).

In our view, the concept of funds of knowledge is connected with the concept of routines or forms of life. The "form of life" is a term used by Wittgenstein (1953). It connotes the sociological, historical, linguistic, physiological, and psychological determinants that comprise the matrix within which a given language has meaning. "So you are saying that human agreement decides what is true and what is false? – It is what human beings say that is true and false; and they agree in the language they use. That is not agreement in opinions but in form of life" (Wittgenstein, 1953, p. 120). Human activity takes place in a particular form of life, a social and cultural matrix, which determines the customs, habits and the uses of any language. In our view, the form of life is the everyday context, usage and cultural function of any artefact involved in human activity. For example, an artefact like a computer is used in a particular everyday context; it has a function, following particular rules and it is used to accomplish a specific goal. It is not possible to consider meaning, identity and funds of knowledge independently of their context,

and sociocultural milieu (Vygotsky, 1978; Moll, 2002; in press). All families have their particular routines and it is from these forms of life that the funds of knowledge and the identity of the members are forged. Thus, to understand their identity and their funds of knowledge we need to know their routines, daily activities and forms of life.

In this sense, we suggest the term funds of identity to refer to the culture-bound stories, technologies, documents and discourses that people internalize and construct in order to make sense of the events in their lives; funds of identity which allow them to reach a self-understanding and to communicate that understanding to others (Bruner, 2001; Esteban, 2010; Esteban & Bastiani, 2011; Esteban & Vila, 2010; Esteban, Nadal & Vila, 2008; 2010; McAdams, 2003). In this theory of identity, we argue that identity takes the form of a story originated by and distributed to family members, which involves community life and shared artefacts, such as television, the Internet, books, flags or cultural beliefs. In this way, identity can be understood as a cultural and social process; a product of family and community socialization. Hence, when a teacher is studying the funds of family knowledge, he/she is studying their funds of identity as well. That is to say, those historically-developed and accumulated technologies of the self (Foucault, 1988) (beliefs, ideas, practices, abilities and skills) that are essential in providing some modicum of psychosocial unity and purpose. In other words, the corpus of family and community knowledge (the funds of knowledge) are essential in the creation of the story of who and what we are, what has happened, and why we are doing what we are doing.

The main objective of this paper is to illustrate the creation of specific curriculum units based on specific funds of knowledge that were identified beforehand. We also describe the quantitative and qualitative strategies that were used to identify the funds of knowledge, forms of life and funds of identity of a Moroccan family who live in Girona (Spain).

Methodology

Participants

The family we studied was made up of nine people: the mother, the father, their four daughters (aged six, eight, twelve and sixteen) and three sons. Three of the girls attend primary school and the other is in secon-

dary school. One of the boys, (who is, in fact, the twin brother of the eight-year-old daughter) attends primary school, one goes to secondary school and the oldest boy works with his father as a labourer. The patriarch of this family came to Spain nine years previously, and the rest of the family had been with him for seven years, which means all the children were born in Morocco. The twelve-year-old girl became a focus of the study because she could act as a link between the school and the family as she was able to speak both Moroccan and Catalan very well.

Instruments

Several research strategies (qualitative and quantitative techniques) were used in order to identify the participants' identity, their funds of family knowledge and their forms of life. In this section, we describe briefly the research strategies employed.

Self portrait. This is an arts-based projective technique designed by Bagnoli (2004; 2009) in the context of a project on young people and their identities with the aim of encouraging participants' reflexivity and getting them to think holistically about their identities and lives. We used a variation of this task (Esteban & Vila, 2010; Gifre, Monreal, & Esteban, 2011) which consists of presenting the participants with paper and felt tip pens and asking them to show who they are at that moment in their lives: "I would like you to show me on this paper who you are at this moment in your life... You can add, if you want, the people, activities, artefacts, institutions and things that are important to you at this moment in life").

Self-definition task. We encouraged participants to answer the question: "Could you define yourself? Could you answer the question: Who are you?". Furthermore, we invited them to fill out a reduced version of the Twenty Statement Test -TST- (Hartley, 1970). The TST is a method of generating spontaneous self-descriptions. In particular, it helps identify those self-designations which may be due more to our "roles" than who we really are or could be. Participants have to answer the question "Who am I?" twenty times – reduced to ten in our version. The instruction was: "There are ten numbered blanks on the page below. Please write ten

numbered blanks on the page below. Please write ten answers to the simple question “Who am I?” in these blanks. Just give ten different answers to this question; answer as if you were giving the answers to yourself - not someone else”. After writing the ten self-definitions, the participants were asked to place them in order of importance: “What is the most important self-definition? Could you order your answers according to their importance in defining your identity?”

Assessment of the family artefacts. In terms of cultural psychology (Cole, 1996; Esteban, 2008; 2010; Esteban & Ratner, 2010), culture consists of material and symbolic tools (artefacts) which accumulate through time and are passed on through social interaction, providing resources for people’s development. In this sense, cultural tools, including physical objects, abstract knowledge, beliefs, values and observable patterns of behaviour such as family routines and social practices, provide resources for people’s development. Thus, in order to understand people (their identities, routines and funds of knowledge) we need to know the artefacts they use. González-Patiño (2011) used a simple and easy task to assess the artefacts that families use in their daily life. It consists of a table with three columns: artefact, use, place. The aim is to record the most relevant artefacts people use in their day-to-day lives. For example, for a particular person, the television might be an important artefact in their life. Thus, we can record the television as an artefact, along with how and where it is used, for example: television – enjoyment & entertainment – in the bedroom.

Routines and educational routines through pictures. Poveda, Casla, Messina, Morgade, Rujas, Pulido & Cuevas (2007) used photographs of participant’s daily lives to study their weekly routines. In particular, the children and families who agreed to participate in the study by Poveda et al. (2007) were given a disposable camera, or used their own digital camera if they preferred to do so. The instruction was: “We are interested in people’s daily lives. We would like to know your routines. To this end, could you take photographs of your daily activities for one week?” There were no instructions as to the minimum or maximum number of photographs that should be taken, nor were there precise instructions regarding who should “take care” of the camera or take the photographs. Once the

week is over, the photographs were collected and printed out in order to discuss them. That is to say, the researchers ask particular questions about the pictures and, in general, the participants' daily routines. Some variation of this task is provided by González-Patiño (2011) who asked participants to "take at least 5 pictures per day of any activities, places, and events which are relevant or important to you." For our purposes, we included an extension of this task in order to focus on educational family routines. In this case, the instruction we used was: "I am studying the educational routines of people. In order to do this, I would like you to collect, by taking some pictures every day for one week, the moments that you think are educational events, for example, when you are showing something to your son or daughter." The aim is to provide some information about educational family acts, for example, when mother and son are reading a book. Another objective is to find out the beliefs that underline educational family practices: What do the parents think of as education? How they are involved in educational practices?

Significant circle. We designed a kind of relational map along the lines of Bagnoli (2009) and Roseneil (2006). Participants were asked to draw a big circle to represent themselves, within which they could then draw important people (inside little circles) and important objects, institutions, activities (inside little squares). If circles and squares are in the middle of the big circle, it means they are more important or relevant to the individual. Thus, the distance from the centre should reflect the presence of significant others and objects within the participant's inner world. As in the Roseneil (2006) relational map, participants were asked to place people in order of importance within a set of concentric circles, with the closest relationships being in the inner circles and the others further out. Moreover, we asked them to add important activities, artefacts, institutions that were relevant in the life of the participant.

Family APGAR. This is a family therapy rating system designed by Smilkstein (1978). APGAR stands for Adaptability, Partnership, Growth, Affection and Resolve, which make up the five categories of the questionnaire. The participants indicate a degree of satisfaction in each of the five categories on a scale of 0 to 2.

Questionnaire on perceived environmental quality. Designed by López-Torrecilla (2009). This consists of 33 self-report scale items with regard to participants' experience of various public spaces: parks, squares, street and school.

Sense of community questionnaire. This consists of 18 self-report scale items on sense of community designed by Sánchez-Vidal (2001) and was administrated in order to find out about the relationship between the participants and their surroundings (community). Sense of community is a concept in community psychology and social psychology which focuses on the experience of community rather than its structure, formation, setting or any other feature. This questionnaire investigates people's perceptions, understanding, attitudes and feelings about their community and their relationship to it and to others' participation. According to Sarason (1974), the sense of community is the conceptual centre for the psychology of community and one of the major bases for self-definition.

Procedure

We visited the family on four different occasions. During the first meeting, in which two interviews were carried out, we were met very cordially by the mother and three of her daughters, aged sixteen, twelve and eight. (The eight-year-old girl has a twin brother.) We were invited to sit down on the couch and have some tea (a very typical custom in Morocco).

The first interview involved one of the daughters, beginning with the first task: Self-portrait. The 12-year-old daughter, who is in her 6th year at primary school, was chosen to carry out the task. The result was very curious because she drew herself very large in the centre of the paper, with the women in her family, her mother and her three sisters, to her left—all the females, including herself, were wearing the veil. She drew the male members of the family, her father, with a beard, and her three brothers on the right.

Figure 2. Sixth grade student's self-portrait



For the second interview, we carried out the “Self-definition task” which was completed by the oldest sister who attends secondary school and is sixteen years of age. She defined herself as being a joker, who was fun and outgoing, who likes music, dancing and singing, and who became sad when it rained.

On the second visit, two more research strategies were carried out, the first being the “Assessment of the family artefacts”. The following artefacts were noted down: computers, televisions, mobile phone, landline, the Qur’an, and other textbooks. Most of these are kept at home except the mobile phone which the father uses to call the family, work or school. The devices are typically used by the entire family, and tend to be located in the dining room or the older brother’s room (see Table 1). The “Questionnaire on perceived environmental quality” designed by López-Torrecilla (2009) was administered as well and was answered by the mother of the family. She seemed quite sincere in answering some questions but needed the help of one of her older daughters to respond and, indeed, to understand most of the questions that were asked.

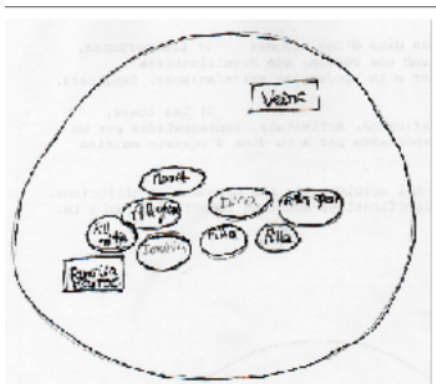
Table 1. Artifacts valued by the family

Artifact	Place	Usage and practices
Computer	Old brother's room	To search information, to play, to chat
Television	Dining room	To watch the news and to enjoy
Mobil phone	House and everywhere	To work and to keep in touch with the family
Phone	Living room	To keep in touch with friends and school
Qur'an	Dining room	To read and study religion values and practices
Books	In different rooms	To learn and enjoy

During the third visit, the “Sense of community questionnaire” - described in the previous section - was completed by the mother.

During the final visit, the mother carried out the “Significant circle” procedure. She included only people (her family and neighbours) - there were no institutions. She mainly emphasized the importance of her husband and her sons and daughters. She mentioned other family members who live in Morocco.

Figure 3. Mother's significant circle



The final research strategy used was the “Family APGAR”, to give us an idea of how the function of the family is perceived. The result was surprising and went against the preconceived ideas we sometimes have about cultures different from our own. Those who answered the questionnaire were very positive about the family and in general felt very important within it.

Once we completed this work, a final project was carried out by pupils at the school that the family’s children attended. The aim was to explain the project through the various photographs and texts taken throughout this experience. There was an exposition of the project that provided explanations to the other pupils from the school using “routines and educational routines through pictures”.

Results

Funds of knowledge identified

After the application of the research strategies indicated above, several funds of knowledge were identified. These are summarized in Table 2.

Table 2. A sample of household funds of knowledge

<p>Geographical location</p>	<p>The importance given to the mother having to travel to be with her husband (one of the main and essential in life). This information was taken using “routines through pictures”.</p>
<p>Politics, society and religious beliefs:</p>	<p>It detects the great importance the family to King Mohamed VI, and His truth. The family that in terms of society, women must be accompanied her husband on the market, in his absence; his elder sons accompany him and their young daughters. Is frowned upon women to go alone to the sites. It is said that the people there are very lively and often play music in the street. As for religious beliefs, their culture, knowledge and education are based on the Koran. Once in life have to pilgrimage to Mecca. This information was taken using “Self-definition task”, “significant circle”, “assessment of the family artifacts”.</p>

<p>Morocco's animals</p>	<p>It refers to the jackal, the rabbit, the cobra, which mounted shows in markets-the gazelle, the macaques. The camels are sometimes used as transport animals, especially for tourism.</p> <p>The family places special emphasis on the Arabs is forbidden to eat pork. This information was taken using "questionnaire on perceived environmental quality".</p>
<p>Climate and vegetation</p>	<p>Reference is made there is much the largest desert of the Sahara Desert, and sometimes water (oases), there are also areas, forests of oaks, firs, pines, Argan, gins, cedar. One of the most important mountains is the Atlas. This information was taken using the "questionary on perceived environmental".</p>
<p>The market and the food</p>	<p>Cooking with many species that would buy the market: they usually go shopping at the market where various craft objects made from clay.</p> <p>At the same time cure buying various species kitchen (pickup) and make tea, very typical for receiving guests at home. This information was taken using the "assessment of the family artifacts", "questionary on perceived environmental", "quality sense of community questionnaire".</p>
<p>Body art ("henna")</p>	<p>The "henna" also is bought on the factories to make carpets, and different dresses. The "Henna" is used mainly to decorate the hands and the rest of the body, especially when there are celebrations. This information was taken using "Self portrait" and "self-definition task".</p>

As noted, central to this project is the qualitative study of households. This approach involves understanding the social history of the households, their origins and development and, most prominently, the labour history of the families, which reveals the accumulated bodies of knowledge of the households. With our sample, this knowledge is broad and diverse, as shown in abbreviated form in Table 2. Notice that household knowledge includes information about geography, associated with the households' transnational experiences, knowledge about policy, society and religion, related to their life style and socialization, as well as knowledge about many other matters, such as animals, climate, vegetation, food or art ("Henna").

In particular, the quantitative and qualitative techniques used informed us about the family's knowledge of geography, policy, religion, Morocco's animals, climate and vegetation, food and art. According to the assessment of artefacts valued by the family (see Table 1), for example, we identified knowledge on religion because the Qur'an is an important artefact involved in many family activities. With regard to knowledge on geography, the pictures captured by family members showed the transnational character of the family. By "transnational, we mean the movement of people, goods, information, ideas and resources among nation states. In particular, the mother travels between Spain and Morocco to visit her relatives and her husband's relatives all of whom are represented in her significant circle (see Figure 3). Policy, society and religious beliefs are reported through the self-definition task and significant circle. The mother expressed a deep understanding of Moroccan culture, its customs, laws and sociocultural practices. For example, in Morocco women must be accompanied by their husbands or elder sons and daughters when going to the market. In particular, religious precepts are pervasive throughout family life. By analysing routines and educational routines through pictures, self-portrait techniques or assessment of family artefacts, we documented the importance of religion in the family's beliefs and behaviour. Other funds of knowledge that were identified included Moroccan fauna, climate and vegetation, Moroccan markets and food and the flowering plant known as henna and how it is used to dye skin, hair, fingernails, leather and wool. Notice that not all techniques administered provide information about specific skills or knowledge. The APGAR technique, for instance, gives us an understanding of the participants' own

assessment of their family's functioning in the areas of adaptation, partnership, growth, affection and resolve.

Teaching activities developed through the funds of knowledge

A total of six teaching units were created and put into practice in sessions of one hour. They were largely based on the funds of knowledge that were identified in the various interviews with the family.

The first teaching unit consisted of three sessions over a period of one week. The aim was to show pupils the location of Morocco, the distances between Morocco and their own home in Catalonia and help them understand the physical distance between the two places. The objectives to be achieved were: to locate Catalonia on the world map, to locate Morocco on the world map, to learn what the capital of Morocco is called and to identify the name and the colours of the Moroccan flag. The teaching activities developed through the funds of knowledge were:

1. Observing and locating Catalonia on a world map using a computer.
2. Observing and locating Morocco on a world map using a computer. (Oral).
3. Locating the continents to which Catalonia and Morocco belong.
4. Locating and painting on a handout where Morocco is and where Catalonia is and drawing a line to indicate the routes back and forth between Catalonia to Morocco.
5. Using a handout with a map of Morocco to work on distances in kilometres.
6. Using a handout to paint the flag of Morocco.

The second teaching unit involved a series of four sessions over 10 days. The aim of this unit was to present the cities, houses and people of Morocco and to learn a traditional Moroccan song to be sung on the final day of the project. The objectives to be achieved were: to learn that Morocco is divided into 16 regions; to learn the name of King Mohamed VI; to learn about and play with Moroccan Dirham coins; to study the typical Moroccan houses and do a painting of one; to learn to sing a traditional Moroccan song and to learn about typical Moroccan street names. The teaching activities developed through the funds of knowledge were:

1. Children's educational video of the typical houses of Morocco for subsequent discussion.
2. Talking about the video they have viewed;
3. Talking about typical Moroccan objects brought in voluntarily.
4. The basic political organisation of Moroccan society. After listening to the teacher read out information on this topic and students then complete a handout with pictures on the theme, filling in relevant information they hear.

The third teaching unit involved a total of six sessions over 12 days. The aim was to observe, in photographs, the main animals of Morocco, especially the animals typically used to transport both foreign and national tourists. The objectives to be achieved were: to identify the typical animals of Morocco, such as the jackal, rabbit, the cobra, the gazelle and the monkey and to identify the main features of one of its most distinctive animals, the camel. The teaching activities developed through the funds of knowledge were:

1. Presentation of different pictures of animals, with subsequent oral discussion.
2. Using a handout with a layout of each animal, several students read aloud a description of the animal and their partners cut and paste the features onto their pictures accordingly.
3. Using the handout and having heard the description of the camel, each student will have a written description of the camel and can then answer some questions about it and then draw and paint a camel.
4. Completing a handout with questions on describing a camel.

The fourth teaching unit consisted of a total of six sessions over 11 days. In this unit, we analyzed the terrain of Morocco, especially the Sahara Desert. We also analysed typical Moroccan fruit and trees. The objectives to be achieved were: to describe the desert landscape and its main features, such as oases, as well as describing the most important fruits in Morocco, the trees and the fruits and they yield. The teaching activities developed through funds of knowledge were:

1. All students make a model of the Sahara Desert and an oasis. They subsequently exhibit and present this model in the final cooperative project.
2. The students made a description of the relief of Morocco using a handout.
3. Using a handout, the students labelled the most important features of typical trees in Morocco and the fruits and vegetables and then drew them.
4. By listening to different pieces of information, they completed information on the subject they had worked on.

The fifth teaching unit consisted of a total of four sessions over 9 days. In this unit the pupils studied and got to know Moroccan food and where to buy it. They also tried cooking typical Moroccan dishes. The objectives to be achieved were: to analyze Moroccan dishes, make lunch with Moroccan ingredients and cook traditional Moroccan dishes and to take part in a traditional Moroccan lunch. The teaching activities developed through the funds of knowledge were:

1. Search for information related to traditional Moroccan food.
2. Carefully read the information handout for subsequent exploitation.
3. The students completed a form with relevant information from the information handout.
4. Using all the processes they had studied, they then all made a collective lunch for all the students in the class.
5. They read all information on file and discussed the most important information .

The sixth and final teaching unit consisted of a total of six sessions over 10 days. In this last unit, the students had to attempt to analyze some typical customs and traditions of Morocco. Finally, they prepared a script for the exhibition of a collaborative project. The objectives to be achieved were: to study and analyze some typical Moroccan customs: afternoon tea; to paint hand decorations with henna; to analyze the ritual of the meal; to listen carefully to two Moroccan stories and answer a few questions orally and to produce a final presentation of the project for an exhibition. The teaching activities developed through the funds of knowledge were:

1. Dictation of the main features of the customs and traditions of Morocco, which the students then had to correct from the blackboard. The teacher then reviewed their corrections.
2. Answer questions on a handout covering the most important information given previously.
3. Do their own hand decorations using henna.
4. Listening to two stories (The Moroccan Wolf and The Coalminer's Daughter) and then responding to oral questions about them:
5. The students prepared a final presentation of this project, "Living Morocco" to be exhibited to all the students of the school.

Figure 4. Final report of “Living Morocco” project conducted by pupils



Conclusion

We have presented a specific experience of a broader research project based on, and inspired by, The Funds of Knowledge Project (González, Moll & Amanti, 2005; Moll, 2011; Moll & Greenberg, 1990; Moll & González, 2004; Moll & Cammarota, 2010). The main goal is to train teachers as co-researchers so that they can study the funds of knowledge in the households of their students and can draw on this knowledge to develop innovative teaching activities in schools. This involves teachers making visits to households in which they assume the role of the learner (Moll, Amanti, Neff & González, 1992) and establish new relationships with the parents of the students based on an assumption of mutual trust, which is re-established or confirmed with each exchange between the two educational settings, i.e., family and school. It leads to the development of long-term relationships which can become the basis for the exchange of knowledge on family or school matters, reducing the various discontinuities that children from diverse backgrounds can experience between the worlds they know at home and the world of school. Children from immigrant communities can experience much less discontinuity when teachers recognize their cultural heritage and their family background.

The concept of Funds of knowledge (González, Moll & Amanti, 2005; McIntyre, Rosebery & González, 2001; Moll & Greenberg, 1990; Moll & González, 2004; Vélez-Ibáñez & Greenberg, 1992) is more precise than the concept of culture or culture-sensitive curriculum because of its emphasis on precisely-situated and specific bodies of strategic knowledge, skills and beliefs that are essential to the functioning of any household. Moreover, it recognizes the educational relevance of any family, regardless of their economic, social or cultural condition.

In this paper, we suggest adopting the concept of funds of identity in order to connect the ideas of funds of knowledge and the identity making process. In our view, funds of knowledge involve the material and resources that people internalize and use to construct meaning. Identity is embedded in tangible, historical cultural factors such as social institutions, artefacts and cultural beliefs (Esteban, 2011a, 2011b; Esteban & Bastiani, 2011; Esteban & Ratner, 2011). In this sense, identity embodies funds of knowledge; it objectifies experience in cultural terms and is stimulated and socialized by funds of knowledge. Funds of knowledge and the iden-

tities of individuals are mutually constitutive and interdependent: two forms of the same distinctive human order. Identity - any lived experience - energizes funds of knowledge and dialectically acquires their cultural features. Nevertheless, the funds of knowledge are dominant. They are the impetus behind identity formation. They organize the form and content of identity phenomena. In other words, the funds of identity are the result of the socially-distributed funds of knowledge. However, identity is not a passive element of society. It is active. People assimilate specific funds of knowledge but they also reject others. Further research is needed to develop this idea and come to a more precise idea of what funds of identity are, how to identify them and how to use them to connect school curricula to students lives. At present, we merely suggest the term as a useful concept.

The research strategies are indispensable in this scenario. We suggest, beyond the standard interview techniques, the use of arts-based methods and graphic elicitation such as pictures, self-portrait, relational maps and other research techniques that we have used in the study described in this article. The aim is to build an empirical understanding of the life experiences of students in order to link teaching to their lives. From a Vygotskian point of view (Esteban, 2011a; Moll, 2002, 2011, in press), education creates human development and we need to design better cultural settings in order to improve school outcomes. Putting family competences and skills into schools is a way of doing that. The challenge is to put the students' knowledge and experiences (their funds of knowledge and their funds of identity) at the heart of teaching.

In summary, in recent decades the cultural diversity of school populations in Spain and other industrialized countries has rapidly increased along with other processes of globalization. However, schooling is currently ineffective for large number of students because the context in schools does not recognize the cultural legacy of these students. In general, the culture of schools expresses the dominant, monolingual, standard ideology. The idea of *funds of knowledge* aims to improve education for minority students who speak, for example, in the United States of America, vernacular varieties of US English or non-English languages. The overall aim is to recognize the linguistic and cultural resources students bring into the schools in order to explore ways in which these resources (funds of knowledge and funds of identity) can be used to ex-

tend the sociolinguistic repertoires - including academic language - of all students. In other words, school practice and teaching has to be based upon - and built upon - the sociolinguistic and cultural resources students bring into the school. The Living Moroccan project is an example of how to go about doing this in the Catalan context. Further research is needed to incorporate other educational activities and to explore the funds of knowledge of multilingual and multicultural families. In our view, it appears crucially important that schools acknowledge the cultural and intellectual backgrounds of minority and marginalized groups if the objective is to provide all students with an education of quality. The *funds of knowledge* approach to identify the knowledge, skills, abilities, ideas, beliefs and identity resources of Moroccan families in Catalonia has been successful in breaking down the deficit thinking that is so often applied when it comes to Moroccan students and families. The project described in this article puts the emphasis on what a particular Moroccan family have rather than on what they lack. We also provide specific methods through which teachers can incorporate such funds of knowledge and identity into their teaching in order to improve the education of minority and Moroccan immigrant children in mainstream Spanish schools.

References

- Acosta-Iriqui, J. & Esteban, M. (2010). Geografías psicológicas de los recursos educativos. *Educación y Desarrollo Social*, 4, 119-129.
- Bagnoli, A. (2004). Researching identities with Multi-method Autobiographies. *Sociological Research Online*, 9, 1-17.
- Bagnoli, A. (2009). Beyond the standard interview: The use of graphic elicitation and arts-based methods. *Qualitative Research*, 9, 547-570.
- Ballenger, C. (1999). *Teaching other people's children: Literacy and learning in a bilingual classroom*. New York: Teachers College Press.
- Bruner, J. (2001). Self-making and world-making. In J. Brockmeier & D. Carbaugh (Eds.), *Narrative and Identity. Studies in Autobiography, Self and Culture* (pp. 25-37). Amsterdam and Philadelphia: John Benjamins.
- Cole, M. (1996). *Cultural psychology. A once and future discipline*. Cambridge, MA: Harvard University Press.
- Esteban, M. (2008). Hacia una psicología cultural. Origen, desarrollo y perspectivas. *Fundamentos en Humanidades*, 9, 7-23.
- Esteban, M. (2010). *Geografías del desarrollo humano. Una aproximación a la psicología cultural*. Barcelona: ARESTA.
- Esteban, M. (2011a). Aplicaciones contemporáneas de la teoría vyotskiana en educación. *Educación y Desarrollo Social*, 5, 95-113.
- Esteban, M. (2011b). The consumer capitalista society and its effects on identity: A macro cultural approach. *Psicología Política*, 21, 159-170.
- Esteban, M. & Bastiani, J. (2011). Constructing the self-concept through culture. A study with indigenous and mestizos students from different educative settings in Chiapas (Mexico). *Cross-Cultural Communication*, 7, 14-21.
- Esteban, M. & Ratner, C. (2010). Historia, conceptos fundacionales y perspectivas contemporáneas de la psicología cultural. *Revista de Historia de la Psicología*, 31, 117-136.
- Esteban, M. & Ratner, C. (2011). A macro cultural psychological theory of identity. *Journal of Social Distress and the Homeless*, 20, 1-22.
- Esteban, M. & Vila, I. (2010). Modelos culturales y retratos de identidad. Un estudio empírico con jóvenes de distintos contextos sociodemográficos. *Estudios de Psicología*, 31, 173-185.
- Esteban, M., Nadal, J. M. & Vila, I. (2008). La construcción de la identidad a través del conflicto y la ventrilocución. *Glossa. An Ambilingual Interdisciplinary Journal*, 4, 130-145.
- Esteban, M., Nadal, J. M. & Vila, I. (2010). La construcción narrativa de la identidad en un contexto intercultural. *Límite*, 5, 77-94.

- EUROSTAT (2006). Population in Europe in 2005. Luxembourg: European Communities.
- Foucault, M. (1988). Technologies of the self. In L. H. Martin, H. Gutman and P. H. Hutton (eds). *Technologies of the self* (pp. 16-49). Amherst: University of Massachusetts Press.
- Gifre, M., Monreal, P. & Esteban, M. (2011). El desarrollo de la identidad a lo largo del ciclo vital. Un estudio cualitativo y transversal. *Estudios de Psicología*, 32, 227-241.
- González, N., Moll, L. C. & Amanti, C. (2005). *Funds of knowledge. Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates.
- González-Patiño, J. (2011). Rutinas de la infancia urbana mediadas por la tecnología: Un análisis visual. *Papeles de Trabajo sobre Cultura, Educación y Desarrollo Humano*, 7, 1-16.
- Hartley, W. S. (1970). *Manual for the twenty statements problem*. Kansas City, MO: Greater Kansas City Mental Health Foundation.
- INE (2011). Sondeo de población. Madrid: Instituto Nacional de Estadística.
- López-Torrecilla, J. (2009). Experiencia infantil del medio urbano y la calidad ambiental percibida en barrios de la ciudad de Madrid. *Medio Ambiente y Comportamiento Humano*, 10, 97-115.
- McAdams, D. P. (2003). Identity and the life story. In R. Fivush & C. A. Haden (Eds.), *Autobiographical memory and the construction of a narrative self. Developmental and cultural perspectives* (pp. 187-207). Mahwah, NJ & London: Lawrence Erlbaum Associates.
- McIntyre, E., Kyle, D. W. & Rightmyer, C. (2005). Los fondos de conocimiento de las familias como mediación de la enseñanza en los colegios rurales. *Cultura y Educación*, 17, 175-195.
- McIntyre, E., Rosebery, A., & González, N. (2001). *Classroom Diversity. Connecting Curriculum to Students' Lives*. Portsmouth: Heinemann.
- Moll, L. C. (2002). Through the mediation of others: Vygotskian research on teaching. En V. Richardson (Ed.), *Handbook of research on teaching* (4th ed.). Washington, DC: American Educational Research Association.
- Moll, L. C. (2011). Only Life Educates: Immigrant Families, the Cultivation of Biliteracy, and the Mobility of Knowledge. In P. Portes & Salas (Eds.), *Vygotsky in 21st-Century Society: Advances in Cultural Historical Theory and Praxis with Non-Dominant Communities* (pp. 151-161). New York: Peter Lang.
- Moll, L. C. (in press). *L. S. Vygotsky and education*. Londres: Routledge.
- Moll, L. C. & Greenberg, J. (1990). Creating zones of possibilities: Combining social contexts for instruction. En L. C. Moll (Ed.), *Vygotsky and education* (pp. 319-348). Cambridge, UK: Cambridge University Press.

- Moll, L. C. & Cammarota, J. (2010). Cultivating new funds of knowledge through research and practice. In K. Dunsmore & D. Fisher (Eds.), *Bringing literacy home* (pp. 290-306). Newark, DE: International Reading Association.
- Moll, L., C. Amanti, C., Neff, D., & González, N. (1992). Funds of knowledge for teaching: using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, 31, 132-141.
- OECD (2007). *Science competencias for tomorrow's world: Results from PISA 2006*.
- Poveda, D., Casla, M., Messina, C., Morgade, M., Rujas, I., Pulido, L. & Cuevas, I. (2007). The After School Routines of Literature-Devoted Urban Children. *Children's Geographies*, 5, 423 - 441.
- Ogbu, J. (1982). Cultural discontinuities and schooling. *Anthropological and Educational Quarterly*, 13, 290-307.
- Roseneil, S. (2006). The ambivalences of angel's "arrangement": A psychosocial lens on the contemporary condition of personal life. *The Sociological Review*, 54, 847-869.
- Sánchez-Vidal, A. (2001). Medida y estructura interna del sentimiento de comunidad: Un estudio empírico. *Revista de Psicología Social*, 16, 157-175.
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a Community Psychology*. San Francisco: Jossey-Bass.
- Smilkstein, G. (1978). The family APGAR: a proposal for a family function test and its use by physicians. *Journal of Family Practice*, 6, 1231-1239.
- Tharp, R. y Gallimore, R. (1993). *Rousing minds to life: Teaching, learning and schooling in social context*. New York: Cambridge University Press.
- Vélez-Ibáñez, C. & J. Greenberg (1992). Formation and transformation of funds of knowledge among U.S. Mexican households. *Anthropological and Educational Quarterly*, 23, 313-335.
- Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1997). *Educational psychology*. Boca Raton, FL: St. Lucie Press.
- Wittgenstein, L. (1953). *Philosophical Investigations*. Oxford: Blackwell.

Xènia Saubich is former teacher of Marta Mata School in Girona and MA candidate in Education & Diversity. **Moisès Esteban** is assistant professor at the department of Psychology, University of Girona.

Contact address: Universitat de Girona, Departament de Psicologia, Plaça Sant Domènec, 9. (17071)- Girona, España. E-mail adress: moises.esteban@udg.edu