

THE VALUE OF DESIGN RESEARCH

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THE SYNERGY OF A WESTERN DESIGN APPROACH AND LOCAL STAKEHOLDERS' PERSPECTIVES, IN A COMMUNITY PROJECT FOR SITUATED LEARNING IN GHANA

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ABSTRACT

As effect of globalisation and the economic crisis, development aid has changed (Stoianova, 2012) and international projects and alliances have increased (Aaltonen & Sivonen, 2009). This asks for a new way of looking at and dealing with development, by working together with different stakeholders from different disciplines and cultural backgrounds. In this project, a design-researcher co-designed for situated learning with a local community in Ghana to explore how a western Design Thinking approach can contribute to an intercultural collaboration process. The project consisted of two periods of fieldwork, of 3 and 8 weeks. In the end, a local learning centre, Discover Area, was co-founded with local stakeholders and organised by a local committee. In the Discover Area, 14 workshops were facilitated for and by community members (craftsmen, teachers, professors, students, children, entrepreneurs..) based on local skills, knowledge and resources (natural and waste materials). In short, this intercultural project has led to two important conclusions. Firstly it is important to maintain balance in intercultural collaborations, as Trait-taking and Trait-making principles suggest (Hirschman, 2011), letting everyone keep their own perspective, as the confrontation of these viewpoints can become fruitful ground for co-design. Secondly, design has the power to synthesise the discussion of viewpoints into experiential artefacts that can create shared experiences between people of different cultural backgrounds. Therewith it demonstrates possible alternatives and allows people to build their own vision or motivations for the topic and this can contribute to taking local ownership, as the local committee in Ghana demonstrated.

Keywords: Intercultural Design, Intercultural collaboration through Design Thinking

1 INTRODUCTION

CONTEXT

Starting in the United States in 2007, the economic crisis has affected the global economy. Most research focuses on the impact in Western countries, but due to the irreversible effects of globalisation, developing countries have been also largely affected (ActionAid, 2012). National governments have introduced cuts to development aid, making it hard for NGO's to maintain their programmes. There has been a decrease in donations for big NGO's but an increase in (donations for) private initiatives (Stoianova, 2012). It is clear that today's challenges demand a new way of looking at- and dealing with development aid.

In addition, as Globalisation rose, international alliances increased. Many studies on international collaborations have shown that these alliances often suffer from miscommunications and misaligned expectations (Aaltonen & Sivonen, 2009). Within a project team but also between a project team and its stakeholders there can be cultural differences with regard to communication, specifically when

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building relationships and dealing with conflicts. These issues can cause lack of feelings of ownership and proper project management by those involved. Project teams, although consisting of experts in their fields, can perform poorly due to insensitivity to cultural differences (Nijhuis et al, 2012). Therefore it is important to crystallise practical guidelines on how to work with cultural differences in international collaborations.

For designers it has been frustrating to learn how many development projects have failed from disregard of product-user- interaction, socio-cultural elements or neglect of implementation or training strategies, although it is the norm in business- as well as social sectors (Brown et al, 2010). Since the value of design lies in its holistic approach to a problem and the iterative process, allowing project teams to learn and grow from mistakes, the focus of this paper aims at demonstrating how Design Thinking can contribute to the development of feelings of ownership of- and responsibility for the initiative in a specific intercultural collaboration project.

CONTEXT OF THE PROJECT

The project was situated in Abetifi, a small town in South-East Ghana where the AMO Programme is located. AMO is a Ghanaian NGO who develop Teacher Learning Materials (TLM's) based on Montessori education, from local wood with local carpenters and sell it to primary schools throughout Ghana. This provided the context of the research: primary education in Abetifi, Ghana.

A former British colony, in 1957 Ghana was the first African country that celebrated independence. Its inhabitants are generally religious, of which 68% are Christian and at least 25% are Muslim (Briggs, 2010). Ghana is known as a hospitable country with a collectivistic and strongly hierarchical culture (Hofstede et al, 2010).

This becomes visible in the classroom, where lessons are one-directional and teacher-centred; children learn by repeating the teacher. They generally do not learn by doing or exploring themselves; education is kept strictly separate from play. From infancy, children have responsibilities in the household. Parents and teachers are perceived to know what is best for the children; they themselves are not part of decision-making processes about their learning. (Adjei, 2012)

Design research challenge:

To what extent can western design thinking foster situated learning within a local community in Ghana?

2 RELATED LITERATURE

Influence of culture on education

Culture cannot be separated from education or school curricula, as schools are embedded within cultural systems (Dimmock & Walker, 2000). In order to establish educational changes, curriculum should be reformed, however, this frequently fails because the local context was not taken into account and implementation strategies are lacking. In order to reach educational change through the development and implementation of high quality curricula, a culture- sensitive approach is necessary (Nijhuis et al, 2012).

Influence of western ideologies in Sub-Sahara education

International development programs have a tendency to overlook cultural traditions as they apply a single global approach, not adjusted to the specific cultural context (Vavrus, 2009).

Western concepts of constructivism and cooperative learning, rooted in Low Power Distance cultures, have been frequently implemented in African schools, in cultures with High Power Distance, resulting in failure or resistance (Phuong-

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Mai et al, 2005). Replications of already existing practices of educational systems are not sustainable over time (Hopkins, 2001).

Goodlad (1979) introduced the 'socio-political perspective': curricula should be suited to societal- and political systems. Cultural factors and trends in the local context affect the process of educational change (Fullan, 2007).

That is where an empathic approach, rooted in social sciences becomes relevant as foundation for a design project that aims to broaden ways of teaching and learning in another cultural context.

Influence of Western Design Thinking on primary education

In relation to primary education, Design Thinking often takes the shape of learning by doing and trial-and-error. Principles of experiential and exploratory learning become integrated in Design Thinking in the context of education. The goal of implementing Design Thinking is to enhance creativity and problem solving skills of children (Mosleh, et al.). This is, interestingly, a Western ideology of children's development (Nijhuis et al, 2013).

3 DESIGN RESEARCH APPROACH

APPROACH

The term Design Thinking (DT) is widely used across sectors. In this design-research project, the definition of the founding fathers of IDEO, David Kelly and Tim Brown, is used: DT is a human-centred process that includes intuition and embraces mistakes as opportunities to learn. This approach promotes working in multidisciplinary teams and is based on tools and research methods of the social sciences and humanities (SSH). It is an optimistic, iterative, constructive and experiential way of going through a design process. Design Thinking overrides the traditional boundaries between public, for-profit and non-profit. "By working closely with the clients and consumers, Design Thinking allows high-impact solutions to bubble up from below rather than being imposed from the top." (Brown et al, 2010, pp. 32).

Design Thinking is a participatory process. An extended form of participation in design is *Co-Design*: literally, people designing together. The concept of Co-Design is that when all people who have a stake in the project are given a role in the development of the project, the design-research project will benefit from a feeling of collectiveness and variety of ideas and opportunities that emerge when combining the viewpoints (Sanders, 2002).

The term Design Thinking is increasingly used to describe open problem-solving processes with a human-centred approach to real world problems, also referred to as '*wicked*' problems (Melles et al, 2012). Wicked refers to the fact that not all problems can be accurately modelled and analysed using the reductionist approaches of science and engineering (Rittel, 1973). Examples are social problems or problems where conflicting stakeholder perspectives are playing a role. In these '*wicked*' cases, engineering approaches are not suitable; creating an opportunity for SSH- and design research. Next to analysing artefacts in a wicked problem, as is the strength of SSH research (Phipps et al, 2012), design-research processes introduce a new tool: making artefacts.

Making artefacts can be done based on contemporary assumptions or contextual findings throughout the design-research process. The artefacts can be evaluated and based on the results further iterations can be done, herewith continuously challenging assumptions and building onto gained insights. This approach is called *Action Research* in the humanities and the social sciences. For design specifically we speak of *Research-through-Design* processes. Herein, a designed artefact is the materialisation of a design rationale, and therefore an evaluation of it is the confrontation of the researcher's hypothesis with practice. Such confrontations take place at various moments in the iterative design

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process, which allows the design-researcher to deepen- and build upon their insights with each iteration (Hengeveld, 2011). Zimmerman et al (2010) suggested that in terms of approach and focus on societal change there are many similarities between Action Research as performed in humanities and social sciences and Research through Design, as practised by design-researchers and Koskinen (2009) suggests that the first provided an underlying model for the second.

SET-UP & ACTIVITIES

The design-research project was set-up in two periods of fieldwork. The first fieldwork consisted of three weeks and was split in two phases. The first phase included observation, shadowing stakeholders in order to gain empathy with- and understanding of the context and construct relations within the community. To achieve this, the design-researcher (the first author) visited and shadowed stakeholders in the field of education by sitting in the classes of primary schools, universities and vocational schools and visiting parents in their homes. In order to get insight in the different viewpoints she also changed her perspective (Tomico et al, 2012) from observing from a third-person perspective, to a first-person perspective by sitting in class as student, to giving a guest lecture as teacher.

The second half of the three week period encompassed two in-situ co-design iterations with the carpenters of the AMO Programme to deepen and reflect on the insights by Research-through-Design (Hengeveld, 2011). The results of the co-design process were two TLM prototypes that were evaluated with three teachers and about 30 children in the classrooms of two primary schools. The evaluation was situated in classrooms where children were asked to 'try a new game' in groups of four. The teachers were asked to divide these groups, but neither they nor the children got an explanation about the TLM prototypes, or what their intention was.

Before the second fieldwork period, an open concept was developed based on the reflections from the first contextual exploration and first two co-design iterations. The idea was to co-found the Discover Area; an open outdoor workshop space where community members can informally learn from each other and in workshops based on local resources; local crafts, skills, expertise and natural- or waste materials. In order to co-develop this open concept further, the design-researcher designed a toolkit with question cards about leadership, brainstorm methods and (business) mappings to stimulate group discussion and ideation.



Figure 1: Toolbox for co-designing in Ghana



Figure 2: Personal invitation/gift for stakeholders

The second fieldwork period consisted of 8 weeks including many sub-iterations that were not planned on beforehand. The project was process-based as unforeseen circumstances were foreseen. The only plan was to establish a local team of people to own and organise the project as soon as possible, so that it would be relevant to the local community and last longer than her intervention as a designer.

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4 RESULTS OF INTERCULTURAL COMMUNITY PROJECT

FIELDWORK PERIOD 1

Objective

The objective of the first fieldwork period was to gain an understanding of the context, daily lives of people connected to the field of education, the stakeholders in this field and the opportunities for design.

Results and analysis

After spending time in Ghanaian classrooms, as a teacher, as a pupil and as a visitor- using the approach of designing from multiple perspectives (Tomico et al, 2009), the design-researcher could conclude that the literature related to the general teaching and learning situation in Ghana matched with her observation. Knowledge sharing was one-directional and there was a strong sense of hierarchy in the classroom; a teacher's authority should not be questioned, resulting in discouragement of critical thinking. Children were taught what to think rather than how to think. The children did not ask questions. Often they raised their hands without trying to give an answer when given the turn- they just wanted the moment of attention. Wrong answers were ignored.



Figure 3: Private Primary school classroom



Figure 4: Interview mother at her shop/house

During the visit of the parents in their houses it became clear that the parents generally felt that it is the teacher's job to educate their children, and parents should focus on the moral upbringing. Confirming the literature (Adjei, 2012) both parents and teachers felt that playing should not happen at school.



Figure 5: Collage of sketchbook as co-design tool with a local seamstress and carpenters

When working as one of the members of the carpenter team in the AMO workshop, the design-researcher learnt that the carpenters were motivated when working in a team although craftsmanship is not a respectful career compared to office-jobs in Ghanaian society. When co-designing two Teaching Learning Material prototypes with the carpenters the sketchbook of the design-

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researcher was a great tool to communicate with the craftsmen: the AMO carpenters, a local seamstress and electrician. It empowered the communication between the designers from two different cultures. The first TLM prototype was a blackboard stand, to be assembled by the children themselves, to develop spatial awareness and collaboration skills. The second one was based on a frequently asked question by teachers: could we not develop a TLM to teach ICT without computers? Our answer was a co-designed TLM as electric circuit puzzle; when connected correctly the children could switch on a light. Both TLM's were based on experiential learning.



Figure 6: Testing TLM 1: Electronic Circuit Puzzle



Figure 7: Testing TLM 2: Blackboard Stand

The evaluation showed that, on the one hand, teachers were initially not comfortable with allowing children to learn explorative; on the other hand, the children were able to learn independently after loads of encouragement. Moreover the evaluation showed that teachers were tempted to give directions or instructions to the children on how to use the TLM making the concept of experiential and exploratory learning suddenly become irrelevant. It was interesting to mention that once the teachers understood the use of the TLM's, they automatically started to form a lesson around them, connecting previously treated material from the curriculum to the new TLM.

Reflection:

The reflection in the first fieldwork was made from two perspectives: the co-design process with the local craftsmen and the experience of the local teachers and children when interacting with the TLM ideas.

The power of SSH-research came to expression through firstly shadowing and observing stakeholders: personal relations and contextual understanding were built. By taking on the roles of the different stakeholders (by teaching, working with wood in the workshop or by sitting in class) a specific understanding of the perspective of the stakeholders was gained (Tomico et al, 2012). Especially co-designing the TLM ideas, using the sketchbook as a tool for discussion and making the prototypes together with local craftsmen created a sharing of perspectives and insights in the intercultural collaboration. Two very practical insights were found. One insight was that when the design-researcher left her sketchbook lying around, Ghanaians would pick it up and browse through it- to later approach the design-researcher to discuss further the sketching and the motivation behind. Leaving the sketches on purpose became a mechanism for spontaneous co-design, based on the curiosity of Ghanaians. The second insight was related to how the design-researcher approached the Ghanaian craftsmen. By asking a lot of questions she showed interest in their ways of doing, respect for their culture and made herself vulnerable. This resulted in extensive responses to her questions, giving her insight in their ways of thinking, their motivations- more than what the 'real' answer would be.

Furthermore it was realised that no matter how well- thought-out a designed TLM is, how many layers of use are designed into it, its value is completely

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dependent of the teacher's implementation of it in class. Before the TLM's can add value in classrooms, teachers should feel the necessity to adopt new education methods. This means that the role of design in this case should not be merely developing artefacts for use, but based on insights from SSH-research, shaping experiences to stimulate a change of mind-set.

The collaboration went quite smoothly and everyone was excited to be a part of the design process. It was, for a designer, a luxurious position that stakeholders were pleased to make time available for interviews or ad-hoc user tests. Looking at the U-curve of Cross Cultural Adjustment, this period can be categorised as the honeymoon stage (Black et al, 1991) for both the design-researcher and the Ghanaians: the excitement for 'the other culture' motivated both sides.

FIELDWORK PERIOD 2

Objective

The objective of the second fieldwork was to establish a stakeholder network around the open design concept that was developed in the Netherlands after reflection on the first fieldwork, and to co-design the design intervention with the stakeholders towards an initiative that was co-designed and owned by the local community.

Results and analysis

The second fieldwork period consisted of 8 weeks including many sub-iterations but started with preparing the infrastructure: re-establishing the relations with the identified stakeholders of the first fieldwork period and sharing the design-researcher's perspective on-, and open concept for, the educational situation. With these stakeholders, the first workshops were arranged and a committee of local responsables for the Discover Area was founded. Flexibility was key and the focus of the research shifted due to contextual factors (examination weeks) and the approach was drastically changed as the Western approach to Co-design did not resonate with the Ghanaian culture. Instead of force-fitting horizontal collaboration, the culturally adjusted co-design approach embraced existing hierarchy and included individual sensitising meetings, the use of intermediates and the fading out the intervention from the design-researcher: one of the committee members was trained to become the successor and chair of the committee, by using the Toolkit that was developed for leadership and organisational matters by the design-researcher.



Figure 8: Collage Discover Area

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Notwithstanding the unfortunate timing of the fieldwork due to 3 weeks of examinations and 1 week of holiday, a total of 14 workshops took place in the Discover Area of which 9 were facilitated by 'expert' resource persons and 5 were open workshops facilitated for- and by children (see Video in the references). The participants of the workshops were mostly children aged 6-16 but also passers-by joined in and university students had a participating or facilitating role during four workshops. The other members of the community proved hard to reach, as the workshops took place during work time. During the fieldwork, two teachers already initiated in-class projects based on workshops done in the Discover Area, such as a group project to make a car, based on the car-from-raffia workshop. This shows that the way of learning in the Discover Area was transferred to learning within the classroom.

Reflection:

The second fieldwork showed the power of design; by creating an opportunity for people to come to the Discover Area and join or organise workshops, people were enabled to experience alternative ways of teaching and learning. People were connected through that experience and that created commitment amongst some of the stakeholders to become the Discover Area committee. The role as western designer in this project was to demonstrate alternatives to the current situation, and allow people to experience it, confront them with a new perspective (as the Ghanaians also confronted her with her perspective!) and trigger reflection based on the differences. The choice whether to act upon the reflection is left up to everyone individually- it is not up to the designer to judge or decide for them.

5 CONCLUSION

Even though the approach to this project was process-based, a lot more flexibility was needed on a personal level in terms of cultural adaptation (Black et al, 1991). After the honeymoon phase that was fieldwork period 1, not long into the second fieldwork the culture shock became apparent, as collaborating based on the western co-design methods proved not to be constructive. Whereas in the project planning it was reckoned that the first fieldwork would provide a realistic preparation for the design-researcher for the second fieldwork, it actually left her with an unrealistic -too rosy- outlook on the next steps. That is why she fell into disillusionment during the second fieldwork, but due to the process-based approach and her socio-cultural insights (from SSH-research) and flexibility to adjust (iterative design process) she was able to adapt to the situation and drastically change her co-design approach as to suit the cultural context: from a horizontal approach to a hybrid horizontal approach by working together with local impactful people.

Figure 9 shows the known U-curve for cultural adaptation, in relation to the role of design and the adaptation of the local community, as this paper described that co-design in Ghana was a vehicle for sharing and confronting perspectives; an experience that influenced not only the design-researcher, but also the local community.

The transformation from culture shock to adaptation was greatly due to the development of a shared language between the design-researcher and the local co-designers. This shared language was founded in design, in sketches and models, but also in SSH-methods through cultural forms of communication. Especially the adaption of implicit communication as opposed to the design-researcher's tendency to communicate explicitly (and expect explicit responses) suited the cultural context and benefitted the collaboration and mutual expectations.

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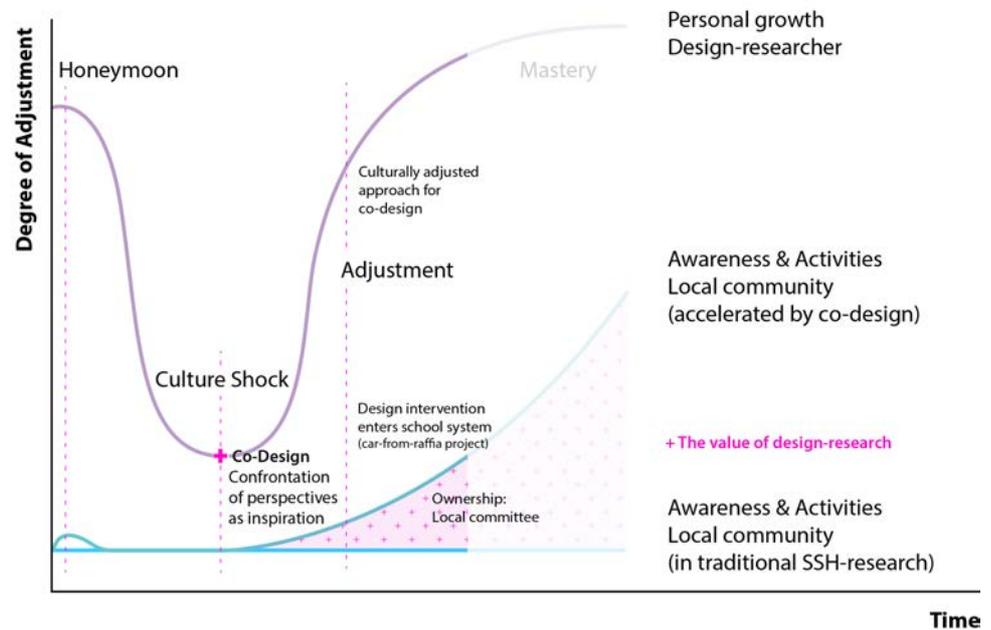


Figure 9: U-curve for cultural adaptation, applied to the design-research case

The two fieldwork periods in Ghana promote the necessity to intertwine social sciences and humanities with design-research when dealing with intercultural collaboration. SSH-methods support empathy development and enable designers to design for and with the often unfamiliar social contexts. That being said, after empathising it is imperative for designers to find their own viewpoint as to develop a design vision on the situation. From that vision, design ideas can be constructed to be confronted with the cultural context. The fieldwork shows that this confrontation of viewpoints is not problematic but on the contrary it is fruitful for co-design; the differences create a mutual fascination that stimulates fertile co-design discussions. Co-design was a vehicle that allowed people to create together, to give shape to what they stand for and to carry out their views, in this case on learning-by-doing. People were co-designing together and herewith discovered new insights. Design, based on insights from the social sciences and humanities, was crucial in the intercultural collaboration process as it makes matters tangible. The physical objects were inspiring to the local community and they all had something to say about how they could have been better designed; which is how the tangibility of design opens room for discussions about implicit values and motivations and self-reflection. The first co-design activities evolved into Ghanaian design activities (for example in the carpentry workshop) and so the local craftsmen ran off with the initial ideas created by the design-researcher; making them their own. By organising workshops without preparing a mission statement for them, the activity of doing the workshops became a formative experience for stakeholders to build a vision for the Discover Area, and brought together a local committee. Also, the committee chose a designated leader and the design-researcher used the toolkit to train him as the successor. In this way the intervention by the design-researcher in their community was phased out, and eventually when she left, the function of the Discover Area remained.

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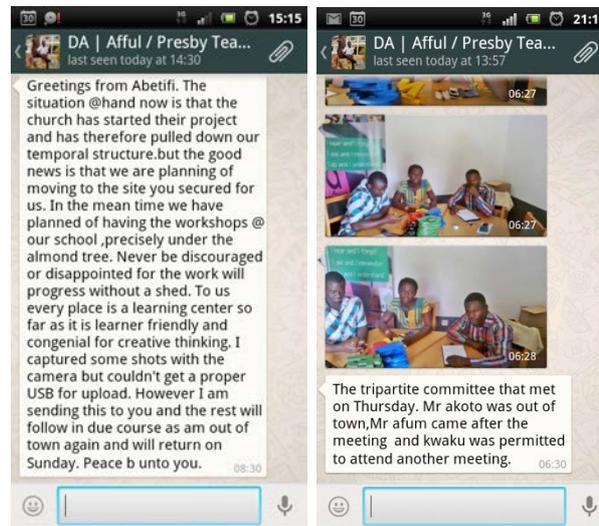


Figure 10: Two WhatsApp screenshots of updates of the Discover Area from the local successor Afful

In short, this intercultural project has made two important conclusions. Firstly it is important to maintain balance in intercultural collaborations, as Trait-taking and Trait-making principles suggest (Hirschman, 2011). In innovation processes, some contextual phenomena should be taken into account, whilst at the same time new concepts should also be introduced, establishing a bidirectional give-and-take situation. In this case, this approach was helped the design-researcher to keep her viewpoint as designer, rather than becoming too empathic to the current situation and not be able to design anymore. Secondly, through synergising the design-researcher's perspective with those of the stakeholders and through exploratory and experiential designed artefacts, fruitful intercultural collaboration can be created. The value of Design Thinking can be then truly demonstrated and benefitted in intercultural collaborations.

6 REFERENCES

- Aaltonen, K., & Sivonen, R. (2009). Response strategies to stakeholder pressures in global projects. *International Journal of Project Management*, 27(2), 131-141.
- ActionAid (2009). Where does it hurt? The impact of the financial crisis on developing countries. Accessed on 10 June 2014 at: http://www.actionaid.org.uk/sites/default/files/doc_lib/where_does_it_hurt_final.pdf
- Adjei, S.O. (2012). The practice of Early Childhood Education and Care in a selected preschool in Accra, Ghana: Perspectives of children, teachers and parents.
- Black, J. S., & Mendenhall, M. (1991). The U-curve adjustment hypothesis revisited: A review and theoretical framework. *Journal of International Business Studies*, 225-247.
- Briggs, P. 2010. Ghana. The Bradt travel guide, edition 5. The Globe Pequot Press Inc, Connecticut.
- Brown, T., Wyatt, J. 2010. Design Thinking for Social Innovation. Stanford Social Innovation Review Winter 2010.

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- Dimmock, C., & Walker, A. (2000). Developing comparative and international educational leadership and management: A cross- cultural model. *School Leadership & Management*, 20(2), 143-160.
- Fullan, M. (2007). *The new meaning of educational change*. Routledge.
- Goodlad, J.I. (1979) *Curriculum Inquiry: the study of curriculum practice* (New York, NY: McGraw-Hill).
- Hengeveld, B.J. (2011). *Designing LinguaBytes : a tangible language learning system for non- or hardly speaking toddlers*.
- Hirschman, A. O. (2011). *Development projects observed*. Brookings Institution Press.
- Hofstede, G. Hofstede G-J. and Minkov M., *Cultures and Organizations: Software of the Mind*. Revised and Expanded 3rd Edition. McGraw-Hill 2010.
- Hopkins, D. (2001). *School improvement for real*. Routledge.
- Koskinen, I., Binder, T. and Redström, J. (2009). *Lab, Field, Gallery, and Beyond*. *Artifact*, 2, 1, (pp. 46-57).
- Melles, G., Howard, Z., & Thompson-Whiteside, S. (2012). Teaching design thinking: Expanding horizons in design education. *Procedia-Social and Behavioral Sciences*, 31, 162-166.
- Mosleh, W. S., Egerer, D., & Leonas, J. *Design Toolkit: Shaping Design Thinking in Elementary Education*.
- Nijhuis, C. J., Pieters, J. M., & Voogt, J. M. (2013). Influence of culture on curriculum development in Ghana: an undervalued factor?. *Journal of Curriculum Studies*, 45(2), 225-250.
- Phipps, D., Jensen, K., & Myers, J. G. (2012). Applying social sciences research for public benefit using knowledge mobilization and social media.
- Phuong-Mai, N., Terlouw, C., & Pilot, A. (2005). Cooperative learning vs Confucian heritage culture's collectivism: confrontation to reveal some cultural conflicts and mismatch. *Asia Europe Journal*, 3(3), 403-419.
- Rittel, H.W.J., Webber, M.M. *Dilemmas in a General Theory of Planning*. *Policy Sciences* 4, 2 (1973), 155-66.
- Sanders, E. B. N. (2002). From user-centered to participatory design approaches. *Design and the social sciences: Making connections*, 1-8.
- Stoianova, V. (2012). Private funding: An emerging trend in humanitarian donorship. *Global Humanitarian Assistance*.
- Tomico, O.; Winthagen, V.O.; & van Heist, M.M.G. (2012). 'Designing for, with or within: 1st, 2nd and 3rd person points of view on designing for systems', NordiCHI '12, October 14-17, 2012 Copenhagen, Denmark.
- Vavrus, F. (2009). The cultural politics of constructivist pedagogies: teacher education reform in the United Republic of Tanzania. *International Journal of Educational Development*, 29(3), 303-311.

Video: [Link omitted to keep authors anonymous](#)

THE VALUE OF DESIGN RESEARCH

The synergy of a Western Design approach and local stakeholders' perspectives, in a community project for situated learning in Ghana

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**11TH EUROPEAN ACADEMY OF
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Zimmerman, J., Stolterman, E., & Forlizzi, J. (2010). An analysis and critique of Research through Design: towards a formalization of a research approach. In Proceedings of the 8th ACM Conference on Designing Interactive Systems (pp. 310-319). ACM.