

Figure 17: Alternative solutions

Several road signs as part of the envisaged environment were included in the drawings, but often on the wrong side of the road. Traffic light colours were often in the incorrect order with figures walking while a red light is displayed (Figure 16). Vehicles were drawn driving on the wrong side, or in the middle of the road. These indications show a basic awareness that road safety signs are present, but indicate a lack of understanding of their real meaning. Many of these learners will soon be leaving their familiar environments in search of jobs in much busier towns and cities. This area of education urgently requires further investigation, especially taking into account the high accident rate in South Africa (according to the Automobile Association of South Africa, there are up to 33 fatalities per day, many of which are pedestrians).

Group 4: Drawings showing alternative solutions

Some transport solutions depicted what Interdesign 2005 called 'alternative modes'. These drawings showed various ways of flying, jumping shoes, scooters and fantasy self-propelling vehicles (Figures 17).

Workshop outcomes

The drawings made during these research workshops, although limited in time and scale, presented a wealth of rich and meaningful information, perceptions and aspirations. These results were shared during the presentations at the end of the first week. A selection of these drawings was displayed for the designers in the other design groups.

The workshops method, as applied by the communication design group, moved learners from being merely a source of background information into an area of active user participation in the design process; that is, generating ideas and possible solutions. According to Press and Cooper (2003:126), the advantages of such research methods are the ability of the designer to draw upon the tacit knowledge of users to identify design issues and solutions, producing design solutions of a 'better fit', shortening the product development and testing cycles, and developing a sense of 'ownership' in the new design. Perceptions and aspirations are clearly an important part of the design problem and if not addressed, could eventually result in possible good design ideas that are not acceptable to users.

The second broad aim of the workshops was design advocacy. Information about careers other than the obvious choices is not readily available in rural areas, and many schools simply do not have the funds to visit career expos in cities. The workshops proved to be an excellent way to expose learners to the process of design. One learner asked if what he did in the workshop was a 'way to innovation' – a very perceptive observation. Print brochures outlining study and career options in the field of design were handed out to interested learners and teachers.

A development communication model

Following the field trips and other information sessions, communication designers were confronted with a large amount of information, experiences and observations. This

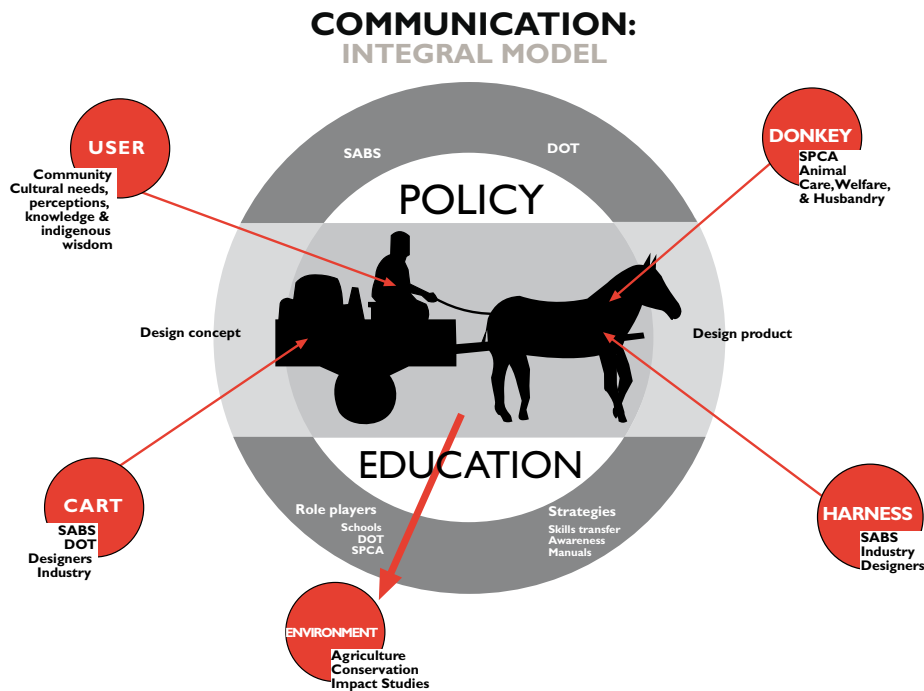


Figure 18: Integrated Communication Framework.

Designers: Communication Design Group Interdesign 2005. Copyright: SABS Design Institute

knowledge had to be internalised and interpreted; a process that, according to Gui Bonsiepe (2000/1:36-37), is part of understanding. Bonsiepe (2000/1:36) also points out how understanding can be facilitated and enhanced by means of visualisation; revealing generally invisible processes.

The first challenge for communication designers was to visualise possible communication models. Figure 18 illustrates the communication complexity of the improved donkey cart as a possible transport solution. The donkey, cart and user are placed centrally in this diagram. They are in turn encircled by policy and education. The key policy maker

is the Department of Transport (DOT), inclusive of local and central government. The other policy maker is the SABS, which is responsible for the development of quality standards.

The lower half of the diagram contains those who play a strategic role in education and development, for example the NSPCA. DOT is also involved in education regarding road safety, previously mentioned as an area of great concern for South Africa. Education also includes skills transfer, for example developing manufacturing or maintenance capacity, as well as business skills transfer.

Five components radiate from the centre of the diagram:

- the user (donkey cart owners, drivers and passengers),
- the cart and its components,
- the environment, including conservation and agriculture,
- hitch and harness (to attach the donkey to the cart), and
- the donkey.

None of these can be ignored in the development of communication strategies, and it is important to note that several of these participants are 'silent'. These include 'silent members' of the community; for example women, children and the elderly, the donkey, and the environment; all of these need to be protected in this development relationship.

It is clear that there cannot only be one sender of a message, but what is not clear is who is actually responsible for inte-

grated communication strategies and implementation. It is possibly the DOT, but many of the areas fall outside their realm. Other parties in local or central government may need to get involved (for example Environmental Affairs, Conservation or Social Development) and this invariably complicates the process. It is clear when looking at the complexity of the model that a multidisciplinary, holistic communication strategy is a necessity before communication designers can design effective, suitable messages.

Integrated new product development (NPD) flow chart

The second diagram designed by the communication design group (Figure 19) takes the communication model one step further by aligning the communication design with the industrial design and new product development process. In this diagram this process is visualised from the abstract and analytical (on the left of the diagram) to the stage of outcomes being real and synthetic (on the right of the diagram).

Charles Owen (2001:27-33) distinguishes three development processes. The first is the one-step development process where the design process starts with an old or pre-conceived concept to be revised. The second process, a two-step model, allows for a planning stage discovering 'what to make', and not only 'how to make' it. The best approach, however, is described as a three-step model, where project planning and concept designing are preceded by meta-planning. Meta-planning includes identification of issues, establishing of resources, 'planning the planning', designing

Donkey Cart - Project Plan

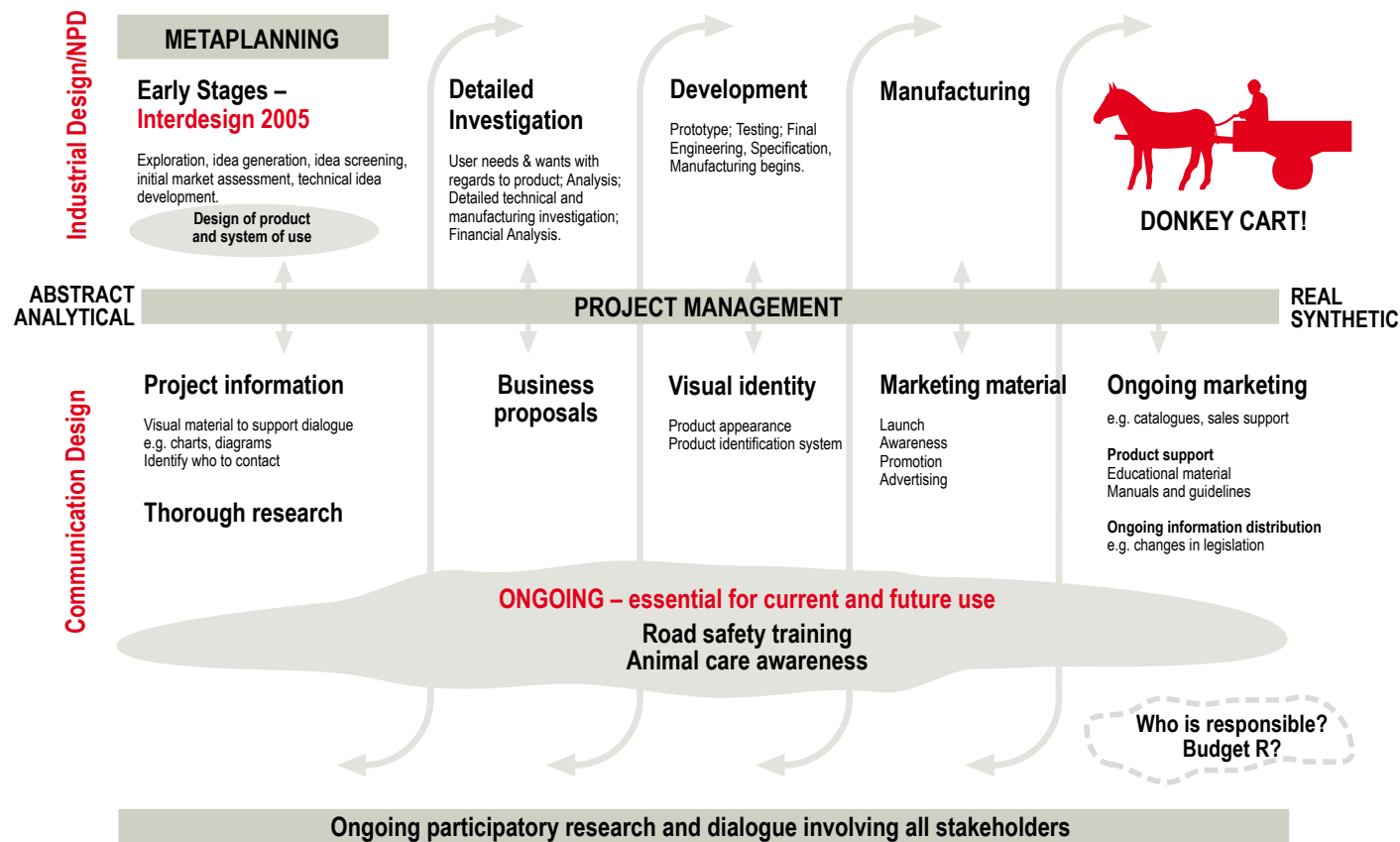


Figure 19: Integrated new product development (NPD) flow chart. Designers: Communication Design Group Interdesign 2005. Copyright: SABS Design Institute

the methodology and preparing a project statement (Owen 2001:32).

It is apparent that Interdesign 2005 moved into a two-step development approach when the Design Institute decided

not to proceed immediately with the development of donkey cart specifications when asked to do so by DOT, but to look at other issues concerned in the development of sustainable rural transport. Much of the approach prior to and during Interdesign 2005 included some characteristics

of Owen's three-step model, that is, exploring contexts. Reality, however, dictated that one of the outcomes of Interdesign 2005 still had to be donkey cart specifications, but it was clear that other solutions needed to be explored.

Figure 19 shows the NPD process as a series of interacting stages. Interdesign 2005 is shown as the planning stage. The subsequent stages take place beyond Interdesign, moving through a stage of detailed investigation, development and manufacturing. Communication design activities are interconnected to the NPD stages, and move from the exploratory initial stages, through the proposal stage, before visual identity and marketing material need to be developed.

Two areas underpin both the communication design and the NPD processes. These are animal care and road safety as ongoing concerns, and the most important, the ongoing involvement and participation of communities. Communication is the link between the foundation or core of a development project: the community, and the technological world.

During the workshop visual communication designers developed examples of designed messages showing project information, identity and marketing material. These included persuasive communication explaining the benefits of new solutions, educational posters concerning animal care, and promotional material. The idea of changing a donkey cart from a commodity type of transport to a possible brand caught the imagination of many of the members of the communication design group (Figures 20 – 22 show some of these ideas). The question remains – is it at all possible

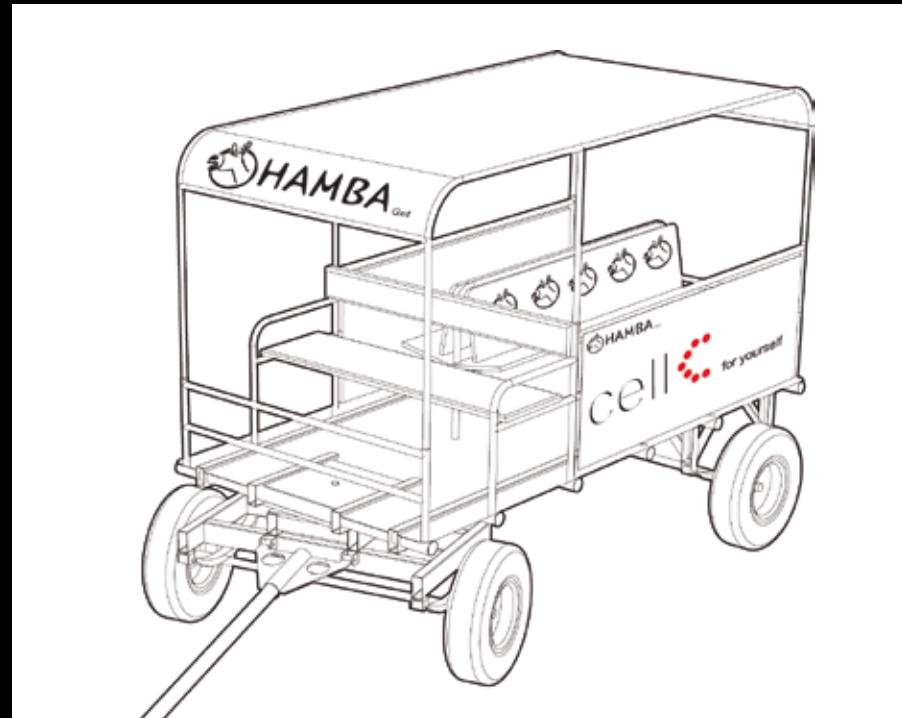
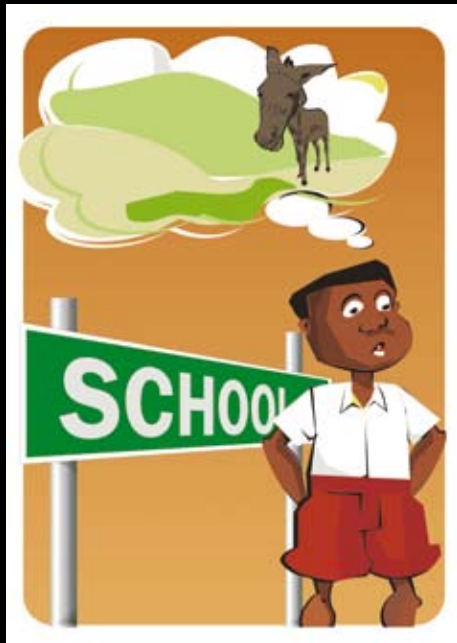


Figure 20 (Left): School posters

Figure 21 (Above): Donkeys rule!

Figure 22 (Top): Donkey cart branding

to make a donkey cart 'cool' through design, or will a donkey cart remain a symbol of poverty? The need for ongoing research that not only tests prototypes, but also acceptance and perceptions, is clear.

The question of who is responsible (for project management after Interdesign) and where funding will come from concludes the aspects shown in the diagram.

Feedback and lessons learnt

The first section of this article reported on the participation of communication designers in research, specifically examining the workshops held at schools. The second section showed the development of the two models. The first diagram presents a holistic communication model for the development of a donkey cart. Communication design is integrated with the NPD model in the second diagram, and is shown as an interface between technological and commercial processes and the community. Both diagrams explore, explain and envisage possible approaches and strategies.

On 21 September 2005, an Interdesign 2005 feedback seminar took place in Pretoria. Progress reports on prototype developments were made, including feedback on initial field-testing. The feedback seminar provided attendees with the opportunity to reflect on Interdesign 2005. The input and participation of the communication design group, as reviewed during the September feedback session, was incorporated in this feedback.

Communication design as part of a multidisciplinary approach

The inclusion of a visual communication group/expertise was seen generally as essential. It was recognised, however, that communication for development is specialised and requires strategic input. The inclusion of social scientists in the communication design group added another dimension to Interdesign 2005 and needs recognition. It was suggested that participants from disciplines such as sociology, anthropology, strategic management and field researchers needed to be included in future Interdesigns.

Communication designers were organised in a separate focus group for Interdesign 2005. However, an informal integration took place during Interdesign 2005, where industrial design groups often asked for input from the communication design group. It is strongly suggested that communication designers must be integrated in the industrial design groups in future Interdesigns.

One of the problems experienced by the communication design group was that the communication designers were the only group with local language skills and more importantly, local knowledge. Therefore, they were often asked to accompany other groups when translation was necessary. It was noted in the feedback session that communication designers should be seen as 'interpreters', but not as translators. These comments indicate that the inclusion of designers with local knowledge and experience in design for development projects is essential. A 'design team' from the community can also participate in the process, and thereby gain design experience. It was further strongly

suggested that each group should have its own translator in circumstances where language may be a problem.

Communication designers' role during research and exploration

The input of the communication design group was recognised during Interdesign 2005 and informal consultation took place between communication designers and other groups, especially in the preparation of drawings suitable for field-testing. However, during feedback, many participants expressed the need for more in-depth research and it was suggested from the floor that communication designers needed to do some pre-visits before an Interdesign. This could mean that industrial design groups felt that communication designers explored and interpreted in a different manner to industrial designers. This difference could of course be owing to the practical advantage of local knowledge, as well as the inclusion of the social scientists in the communication design group. Nevertheless, it was clear during feedback that research, specifically for development design, needs further development regarding suitable and reliable research methodologies. The role that tertiary institutions and researchers can play in the development and testing of suitable methods was highlighted.

Design advocacy

The contribution of the communication design group as advocates for the design discipline amongst teachers and learners in the communities was recognised positively, and

was part of the broader underlying aim of the Design Institute. Communication designers related well to the learners, and grasped the opportunity to learn as much from learners as the learners could learn from the designers. The enthusiasm and passion for design were clear.

Input on a meta-planning level

The principal contribution according to the feedback report was the participation of the visual communication group at a meta-planning level. The exploratory diagrams played a role in that they formed a basis for dialogue and future planning. In the diagrams, scenarios are visualised, showing the relationship of communication design with the NPD processes. Communication is a 'powerful tool that can improve the chances of success in development projects' (World Bank [sa]). Most importantly, communication design acts as a link between the technology driven NPD processes, business partners and policy makers, manufacturing and others involved in the product life cycle, and the community – who should all benefit from the intervention. It was recognised, however, that in order to give input at a real and synthetic level, the group will have to be involved over a longer period.

Attendees at this session agreed that Interdesign 2005 was a successful design workshop, but also saw it as only the start of a process that should be completed in order to be a meaningful developmental project and design promotion activity. However, Interdesign 2005 gave communication designers the opportunity to participate and confirm that design can contribute towards a better life for many South Africans.

Conclusion and future directions

It is clear that the organisers and other participants felt that the inclusion of communication designers was not only positive, but also essential. Initially, the role communication designers had to play was not clear to both industrial designers and organisers (and even to some of the communication designers unfamiliar with the idea of design for development). During the Interdesign 2005 workshop communication design's role manifested in two broad areas, the first was the generation of possible communication design solutions that could solve transport problems (for example information kiosks). The second area was perhaps more important and relevant than the first in this particular project: the possible development of various visual interfaces between government, industrial designers, developers, final solutions, society and users. The two-week format of Interdesign 2005 only allowed for this area to be generally mapped and selectively visualised, and could not be fully developed. However, the need for and future role of communication design became clearer to organisers and participants during this process.

Interdesign 2005 also pointed out, on a more pragmatic level, the need for communication designers with specialised skills and understanding in the field of development communication. This includes designing for various levels of literacy, as well as appropriate research skills. Interdesign 2005 provided a group of mainly young communication designers with valuable learning experience, enabling them to work with international industrial designers and a variety of other participants. This type of interaction is often not possible in a commercially driven studio. A further component in this learning curve is the move away from the

familiar communication design process with a focus on fixed outcomes, to a process based on complex relationships built around the real needs of real people. Interdesign 2005 called for communication designers to participate with industrial designers in a project well known to industrial designers; an invitation answered by only a few dedicated, mostly young communication designers. It is hoped that Interdesign 2005 formed a foundation for future collaboration between the two design disciplines and professional bodies (Icsid and Icograda), establishing a starting point for a long-term design partnership with a common goal: designing a better world for all.

The outcomes of the communication design group would not have been possible without the input of the following group members:

Group members

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References

- Automobile Association of South Africa. [Sa]. Available: <http://www.aa.co.za> Accessed: 2006/03/06.
- Bonsiepe, G. 2000/01. Design as tool for cognitive metabolism. The role of design in the socialisation of knowledge. *Image & Text* 9:36-39.
- National Department of Transport. 2003. A draft rural transport strategy for South Africa. Available: www.interdesign2005.org.za/pdfs/NatRuralTransStrategy.pdf Accessed: 2006/03/06
- Owen, C. 2001. Structured planning in design: information-age tools for product development. *Design Issues* 17(1):27-43.
- Press, M & Cooper, C. 2003. *The design experience. The role of design and designers in the twenty-first century*. Hampshire: Ashgate.
- SABS Design Institute. 2005a. *Interdesign 2005*. Available: <http://www.interdesign2005.org.za/pages/home.htm> Accessed: 2005/11/24.
- SABS Design Institute. 2005b. *Report – Design as a catalyst for development: comments and views on Interdesign 2005 on Sustainable Rural Transport*, 21 September, South African Reserve Bank Conference Centre.
- World Bank. [Sa]. *What is development communication?* Available: <http://web.worldbank.org> Accessed: 2005/11/23.