

PRIMARY AND SECONDARY TEACHERS' CONCEPTIONS ABOUT HERITAGE AND HERITAGE EDUCATION: A COMPARATIVE ANALYSIS.

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Abstract

This study describes and analyses the conceptions of primary teachers and secondary teachers of Physics-Chemistry, Biology-Geology and Geography-History with respect to the concept of heritage and its teaching and learning, taking the model of teacher-researcher as the theoretical referent. The data collection instrument used was a questionnaire, designed on the basis of categories which in their turn were used for the analysis of the resulting data. The results show a high degree of homogeneity in pedagogic content knowledge, in contrast to the heterogeneity of the conceptions with respect to purely content knowledge.

Keywords:

Conceptions about heritage, Heritage teaching and learning, Physics-Chemistry teachers, Biology-Geology teachers, Geography-History teachers, primary teachers

1. INTRODUCTION.

It can be noted that in recent decades, albeit to a limited degree, both formal and non-formal education have seen attempts to develop forms of study which give a significant role to questions of heritage, although this has often seen quite diverse perspectives in relation to conceptualisation, ends, subject content and methodology regarding its teaching and dissemination. It is precisely these representations of heritage – teachers' views of its teaching-learning, administrators' views of its dissemination – which interest us; working from an interdisciplinary perspective (Social Sciences Education and the Experimental Sciences Education) our research group designed an I+D project for the purpose, gaining a three-year discretionary grant from the competent Spanish ministry.

Studies of conceptions represent a priority for educational research, as is evident in the studies undertaken in the fields of the Experimental Sciences (Gallagher, 1991; Porlán, Rivero y Martín del Pozo, 1998; Da-Silva, Mellado, Ruiz, and Porlán, 2005; Taylor, 2006; etc.) and the Social Sciences (Evans, 1989; Thornton, 1991; Pagés, 1993; Quinland, 1999; etc.). With respect to heritage, various studies of subject disciplines are available, such as the collection edited by L. J. Smith (2007), with a large representation of the Social Sciences. Nevertheless, there are fewer studies from an integrative perspective (Lowenthal, 2005; Olwig, 2005), and fewer still those tackling methodological questions concerning heritage at primary and secondary level (Bennet, Sandore and Pianfetti, 2002; Fontal, 2003; Tutiaux-Guillon, 2003; Hernández Cardona, 2003; González and Pagés, 2005). Of particular merit is the work of Cuenca (2004) into the conceptions of trainee teachers, in which heritage is conceptualised from a systemic, holistic and complex perspective, and which we follow in the present study.

The aim of this study is to reveal the conceptions of heritage and its teaching held by primary and secondary teachers and heritage administrators, to determine their level of development and to identify potential obstacles to progression in their professional knowledge. In the first and second stages of the study the theoretical foundations and instruments for data collection and analysis were established and presented (Estepa, Wamba and Jiménez Pérez, 2005; Wamba and Jiménez Pérez, 2005; Cuenca and Estepa, 2005; Estepa, Cuenca and Ávila, 2006). A study of 44 websites maintained by museums and heritage interpretation centres was also carried out (Ruiz Fernández, Wamba and Jiménez Pérez, 2004; Cuenca and Estepa, 2004; Cuenca and Ruiz Fernández, 2005). The third stage of this project has focussed on the compilation of data from a sample of 126 teachers and 33 heritage administrators by means of a questionnaire, a descriptive analysis of which can be found in Estepa, Ávila and Ruiz Fernández, 2007, as well as a qualitative and multifactorial study of the same (Jiménez Pérez, Cuenca y Ferreras, in press), and a brief comparative analysis of the three groups of teachers at secondary level (Wamba, Jiménez Pérez and Cuenca, 2006).

These prior studies allow this paper to focus on delimiting the similarities and differences in the conceptions of the four groups comprising the sample in terms of their initial training and the educational level in which they currently work: the primary teachers having followed a three-year university course with special attention given to educational psychology, but otherwise offering a general coverage of subjects to be taught; the secondary teachers of Geography-History, Biology-Geology and Physics-Chemistry having

followed a five-year course specialising in one of their two subjects, with a brief postgraduate teaching course required for entry into the profession.

The findings of the study will be used to inform the design of teacher training and in-service courses, taking as starting point the prevalent conceptions within these groups with the goal of stimulating development towards a holistic, integrated view of heritage in the teaching-learning process, and taking the research-based model as theoretical referent (Porlán et al. 2001; Porlán, Martín del Pozo and Martín Toscano, 2002).

2. METHODOLOGY.

The geographical ambit of the project was demarcated by the triangle formed by Huelva-Seville-Cadiz, an area of sufficient cultural homogeneity to provide consistent results. All teachers who comprised the sample worked in either the primary or secondary sectors within this area.

The sample maintained the ratio between the number of students in Huelva, Cadiz and Seville (1:2:3) and was determined on the basis of the towns with the largest schools, or in the case of there being more than one school in a particular town, randomly. This gave a total of 66 primary schools in the three provinces: 11 in Huelva, 22 in Cadiz and 33 in Seville. Unfortunately, this ratio was not preserved intact as the number of teachers completing the questionnaire fell a little short at 49, and this then became the sample actually used. In the case of the secondary teachers, the sample was taken from state secondary schools (known as IES: Instituto de Enseñanza Secundaria) with the same ratio between the provinces. This resulted in 36 schools, with a teacher selected for each of the three subject areas which were considered to be relevant to heritage teaching: Geography-History (G&H), Biology-Geology (B&G) and Physics-Chemistry (P&Ch)¹. In this case 108 teachers were targeted (18 in Huelva, 36 in Cadiz and 54 in Seville), although again the sample ultimately comprised the 77 who completed the questionnaire.

The data collection instrument used was a questionnaire, to be completed anonymously as in other recent studies of these characteristics (Reis-Jorge, J., 2007; Tsai, CC., 2006). It comprised 12 questions, with slight variations in the formulation and content according to the target province. Six of the questions were completely open-ended, whilst the other six gave options, albeit with opportunities to amplify the response in the first two of these. In most of the questions, then, respondents were free to write what they wanted, as it was felt that 'closed' questions, whether yes/no or multiple choice, would fail to reflect the teachers' genuine opinions. At times responses were succinct, although this was compensated by spontaneity and nuance elsewhere, which made for a more qualitative analysis. The questionnaire was validated by two means: via a panel of experts in the teaching and dissemination of heritage, and a rating exercise with teachers who met the same requirements as in the sample, and worked in schools that had not been originally selected for the research project.

The responses to the questionnaire were considered stated conceptions, which, in a subsequent stage of the project, will be contrasted with interviews with some of the teachers from the sample who are most representative of the types of thinking that were detected. A perennial problem for the researcher using these kinds of methods, which hinders the interpretation of the results of the questionnaire, is that the information provided by the respondents often represents more what they believe they should say than their true opinions and conceptions, even though these "fictions" are usually unintentional, attributable to the desire to respond in a way that is consistent with their theoretical considerations (Bromme, 1998). To palliate this disadvantage, we adopted several strategies: the questionnaire was anonymous; completion was voluntary and devoid of any evaluative character, and the design maximised the use of open-ended questions to achieve a more rigorous and direct reflection of the respondents' thinking and so avoid distortions.

The data were analysed using a system of categories and subcategories defined in a series of indicators and descriptors taking the form of a hypothesis of professional development in relation to heritage and its teaching-learning, as described in an earlier work (Wamba and Jiménez Pérez, 2005; Estepa, Cuenca and Ávila, 2006). This system was conceived of as a second order instrument, but it nevertheless determined the content of the

¹ These subject pairings are standard in the Spanish education system; teachers specialise in one of the disciplines at university but take teacher entrance exams in both.

questions in the questionnaire and guided the whole analytical process of the research project. It provided the necessary rigour for a study aiming to interpret the responses of professionals, and apply a classification system to their conceptions according to a set of descriptors. Three categories were established: heritage typology and concepts, models of heritage teaching and dissemination, and heritage and identity, although in this paper we focus on the first and second of these (see Table I). With regards to the hypothesis of development in conceptions, Porlán and Rivero (1998) general hypothesis of professional development provided the theoretical frame, in particular the teaching models pertaining to the sciences, by which a scale of development in these conceptions was established (see Figure 1).

3. RESULTS AND DISCUSSION.

In this section we present a comparative analysis of the conceptions deriving from the sample according to the dual category system mentioned above. As can be seen, the analysis of the data, discussion and results are dealt with in the same section, due to the limitations placed on the publication of this type of research. For questions involving scalar information only the percentage of teachers within a particular group that selected the highest values along the scale were taken into account, as these were considered the most statistically relevant for defining a tendency. In addition, with respect to each subcategory, not only did we calculate the percentages for each response, but we also made a global analysis to determine the stages of development with respect to the conceptions, after codifying the responses in ascending numerical order using SPSS (v14.0). This codification represents the order of complexity of the descriptors for the category system, according to our hypothesis of development (see Table I and Figure I).

a) Personal details and educational background of the sample

In terms of geographical location, the majority of secondary teachers lived and worked in a distinct location to their place of birth, in contrast to 61.2% of the primary teachers who were employed in the town where they were born. The average age of the sample was between 31 and 40; 41-50 for the primary teachers. With respect to initial teacher training, eleven (40.7%) Biology-Geology, 19 (67.9%) Geography-History and 16 (32.7%) primary teachers reported their studies as having included material on heritage, as opposed to a single (4.5%) Physics-Chemistry teacher. As regards in-service training in heritage, just three (13.5%) Physics-Chemistry teachers had done courses, a figure which doubled to six (22.2%) in the case of Biology-Geology teachers and reached 14 (50%) with respect to Geography-History teachers, whilst only 26.5% of the primary teachers reported having done any training in the area.

b) Formulations regarding the concept and typology of heritage

In the first category, we considered the responses for question 1 (cf Table II) which we divided according to the specialist area of the respondents. The suggested artefacts were representative examples of heritage drawn largely from a geographical context, the teachers' responses to which would give us an insight into their conceptions of heritage and its different types.

From analysis of these data, we can first note that it is the Physics-Chemistry teachers who have the most restricted vision of the concept of heritage, as they return the highest percentage of negative responses when considering whether the artefact in question constitutes heritage. In contrast, it is the Geography-History teachers who return the highest number of positive responses, underlining a wider vision of this concept, while the Biology-Geology teachers returned percentages close to, although lower than, those of Physics-Chemistry, and the figures for the primary teachers are very similar to those of the latter group.

The three artefacts where this restrictive conception is most in evidence are: the Guggenheim museum (Bilbao), an example of contemporary architecture; the steam iron, an everyday domestic item from the 19th century and testimony to a pre-electric technology; and birds which make their nests in town, an example of a systemic view of the urban environment. Thus, with respect to the Guggenheim building, more than half (54%) the Physics-Chemistry teachers in the sample did not consider it heritage, a figure which dropped to 40.7% with the Biology-Geology specialists, 34.7% with the primary teachers and just 14.2% with the Geography-History teachers. These figures underline the prevalent tendency amongst the Physics-Chemistry teachers not to consider as heritage contemporary artistic artefacts, a conception shared by a large part of the other groups in the sample with the exception of the Geography-History teachers.

With respect to the steam iron, the percentage of negative responses from the Physics-Chemistry teachers is even higher (72.7%), as is that of the Biology-Geology teachers (63%) and the primary teachers (59.2%), with a clear dominant tendency amongst these three groups not to consider as heritage this ethnological technological artefact. Nevertheless, approximately a third (32.1%) of the Geography-History teachers also stated that they did not consider the item as heritage, indicating the strength of a more restrictive conception with regard to this type of artefact.

Finally, as to birds nesting in towns, the most interesting finding is that this tendency is not repeated for the Biology-Geology teachers, the only group in which the majority (51.8%) considers them 'natural heritage, characteristic of an area, urban wildlife of ecological interest, important for the ecosystem within the urban landscape'. We assume that this positive valuation is related to this group's particular background in biology which has provided them with a greater sensitivity to fauna and its conservation.

From this description and analysis, it follows that, applying our hypothesis of development (cf Diagram I and Table I), the four groups making up the sample would be at an intermediate developmental level in terms of conceptions, with a predominant conception of heritage along aesthetic and historic lines, although one notable section of the Geography-History teachers and, to a lesser extent, the primary teachers, could be placed at the level of maximum development, which we denominate the symbol-identity perspective of heritage. However, with respect to heritage typology, there is a predominance among the Physics-Chemistry and Biology-Geology teachers of conceptions which can be placed at the entry level in terms of (not) recognising natural as well as historic-artistic artefacts as heritage, while the majority of primary teachers can be found at an intermediate level for their inclusion of ethnological elements, and the majority of Geography-History teachers at the level of maximum development, which is characterised by a fully integrated or holistic view of heritage.

As these data suggest, the conceptions drawn from the sample, according to a holistic view of heritage, are largely determined by the subject studied at university and subsequent professional context, such that the teachers of physics and chemistry, along with those of biology and geology as well as primary teachers share a predominantly simple view of heritage, which can be most clearly seen in the restrictive criteria they use for its identification.

c) Conceptions concerning models of heritage education

For the analysis of this category we will first focus on the responses to questions 5, 6, 7 and 10 of the questionnaire, the last of which required the teachers to rate the suggested items on a scale of 1 to 7, with the only the percentages of 6s and 7s on this scale being used in this study.

The question to be considered regarding teaching models is that relating to the use of heritage in class. As can be seen in Table III, all the Physics-Chemistry teachers affirmed that they made use of heritage in the teaching of their respective subjects 'never, rarely or sometimes', as against 89.3% of the Geography-History teachers who selected 'always' or 'almost always'. It is interesting to note that the majority of both Biology-Geology teachers and primary teachers stated that they made use of heritage in class sometimes; perhaps the similarity in the responses of these two groups is due to their shared nature-oriented view of the topic.

The responses above suggest that the main tendency among Physics-Chemistry and Biology-Geology teachers is characterised by a minimal use of heritage, which would place these conceptions at the initial stage of our hypothesis of development. The majority of primary and Geography-History teachers, on the other hand, viewed themselves as using heritage as a teaching resource, and as a source of socio-historical and scientific-natural information, which is suggestive of a greater degree of development in their conceptions, indicative of an intermediate level in our hypothesis of development.

Moving on to consider the teachers that did make use of heritage in their classes, the most frequently selected form was that of out-of-class activities and visits to specific heritage sites or items, although 40.9% of the Physics-Chemistry teachers failed to respond to this question, again underlining their limited commitment to heritage issues (see Tables IV and VII). From the point of view of appropriate activities for heritage teaching and learning, in the light of the data in Table IV, it is pertinent to note the minimal importance given to traditional activities such as slide-shows, videos, and teacher talks, all of which scored low across the whole sample, as summarised in Table VII. It would seem that heritage teaching takes a more hands-on approach on the part of both teacher and pupil, with 'in situ'

activities, although this need not suppose a rejection of an overall traditional conception of education, as will be seen below.

In fact, the majority of the teachers in the sample structure their out-of-class activities and visits to heritage sites (cf table V) with a single stage, using a traditional methodology whereby 'the teacher selects the heritage site or artefact to be studied, explains and organises the activity the students are to do, orienting them with regard to what they are going to see, while the students take notes and collate additional information, individually or in groups. In the visit itself the students focus their attention according to the teacher's prior guidelines. Sometimes specially designed educational packs or field notes are used which the students complete and later discuss in a feedback session'. As is typical of traditional methodology, the role of the teacher is active while that of the student is totally passive. Regarding this conception it should be noted that it is the Physics-Chemistry teachers (54.2%), along with the Geography-History teachers (53.5%), who most describe their teaching along these lines, while the lowest percentages are found amongst the Biology-Geology and primary teachers. Within this traditional model, it is worth noting the importance that the Geography-History and primary teachers give to the specialist teaching material developed by the Office of Heritage Education, local offices of which are to be found in all provincial capitals of Andalusia, including those where the research project took place.

A second type of visit involves two stages, in which 'the teacher leads a discovery activity whereby the students look for information beforehand in the classroom and then amplify it in situ at the selected heritage site or artefact. At other times, all the information is gathered in the visit itself, either from the teacher's exposition or by the students themselves, and the results or conclusions are subsequently presented in class'. In this case the role of both teacher and students is active. Regarding this type of visit, the sample returned the following: the Biology-Geology and Physics-Chemistry teachers, along with the primary teachers, ascribe to it with similarly low percentages (11.1%, 9.0% and 10.2% respectively), while the percentage of the Geography-History teachers is minimal.

Another type of visit is that involving three stages, in which the methodology remains that of guided discovery, in the sense that 'the teacher prepares for the visit with the students, via a search for information both in the classroom and out of it, visiting the selected heritage artefact; afterwards, both parties share their findings once back in the classroom'. Here, the role of both is active. This kind of visit is more frequent amongst the Geography-History teachers (25%) and primary teachers, who also add another stage (4-stage visit) by which the process of learning is more inductive and participative, enhanced by subsequent classroom debates as can be observed by the percentage corresponding to item b in table VII.

The analysis above leads us to conclude that the sample employs a traditional methodology in its heritage teaching, although out-of-class activities take on an active and participative nature in constructing meanings, with a notable absence of innovative methodologies (Ávila, 2003a; Estepa 2001), except in the case of the primary teachers, who gave a high valuation to interactive activities, simulation and decision-making games, and designing workshops (cf table VII). In view of such methodological conceptions, one-way communication predominates, whereby the students take a passive role, with the exception of the primary teachers. This places the secondary school teachers' conceptions at the first level with respect to this subcategory, while in the group of primary teachers, with a strong methodological component in their initial training, we found a greater number of responses which could be ascribed to the second level of our hypothesis of development, the chief characteristic of which is the designation of an active role for the students. It is solely with respect to classroom communication, then, that we find homogeneity amongst the secondary school teachers beyond their specialist areas and in comparison with the primary teachers.

Question 9 in the questionnaire concerns the ultimate aims which the various groups in the sample attributed to heritage education. Up to six items were offered for rating from 1 (least relevant) to 6 (most relevant). Table VI shows the percentages of 'most relevant values (5 and 6) given to each of the suggested items. What becomes clear from an analysis of these results is the high valuation given to item 'c', suggesting that the chief aim of heritage education for all the groups in the sample without exception is to awaken in the students sensitivity towards conservation. This conservationist conception gains its highest value (82.2%) among the Geography-History teachers and its minimum (45.4%) among the Physics-Chemistry teachers, although it remained the highest scoring item for this group.

In second place, we can also note the high valuation given to items 'd' and 'f', both examples of aims concerning critical thinking about heritage. The high scores from the primary teachers are especially noteworthy, which we interpret as a result of a more integrated view of pupil education, while the lowest scores are those of the Physics-Chemistry teachers.

Consistent with the above results, the items which were least valued by all the groups of the sample were 'a' and 'e', which focus on purely cultural or academic aims. In any case, what seems somewhat contradictory is the relevance of the aims attributed to heritage education and, nevertheless, the minimal use made of it in lessons, as was seen in the analysis of question 5 of the questionnaire. This apparent contradiction can be interpreted as a major discrepancy between the stated aims and classroom reality, underlining, as with other content matter in the Social Sciences, the enormous distance between what the teachers consider the fundamental goals of their teaching and the day-to-day practicalities of the classroom (De Alba 2003).

Hence, regarding the fifth subcategory we detect in the four groups making up the sample the predominance of the conceptions which we have denominated practical-conservationist, which we place at the second level in our hypothesis of development, in that it fosters a somewhat obsessive conservation of all heritage artefacts as opposed to a balanced commitment to its preservation.

CONCLUSIONS AND IMPLICATIONS FOR TRAINING

The aim of this research project is not the study of a group or educational situation, but rather the educational use which is made of one content area – heritage – and its pedagogical treatment; that is to say, it concerns an initial exploration of what is considered heritage in education, and what is taught and how with respect to the groups in the sample. In order to obtain information about this object of study we have investigated the conceptions of secondary school and primary teachers, which we can consider representations of the professional knowledge managed by teachers when they teach, in our case, heritage. From a constructivist and critical perspective of teacher training, these ideas constitute the point of departure and a continuous reference throughout this training period to be acted upon and developed (Adler, 1991; Armento, 1996) towards a desirable heritage pedagogy, the level of maximum development in our hypothesis of development of professional knowledge, taking the model of teacher-researcher as theoretical referent (Porlán y Rivero, 1998; Porlán, Martín del Pozo and Martín Toscano, 2002).

From the perspective of this level in training, heritage artefacts present themselves as single socio-cultural elements constructed holistically via various manifestations of an historical, artistic, ethnological, scientific-technological and environmental nature (Tunney, 2004; Scazzosi, 2004; Heyd, 2005), which taken as a whole allow an integrated knowledge of different societies, both past and present, giving rise to structures of social identity which become cultural symbols (Cuenca, 2004). This cultural property forms part of systems, and the understanding of its meaning and value increases when each object is linked with others in relations of synchrony, diachrony, genesis, derivation, analogy or difference, by which heritage takes on a systemic dimension to produce processes of comprehension of the systems to which the property which is the object of study belongs (Mattozi, 2001).

From our perspective, heritage education is not an end in itself but should rather be integrated into the overall educational process, within the general aims set out for the state education system, because of its relevance to the development of programmes for environmental education, scientific literacy and citizenship (Estepa, Wamba y Jiménez, 2005). Through reference to heritage in all its manifestations, it is possible to encourage critical thinking about the socio-natural environment, independently of whether this brings with it aims concerning the conservation and appreciation of heritage itself, or knowledge about the items themselves and the procedures for their analysis and research, something that should never be confused with the ultimate aim of the educational process.

With these suppositions in mind, the description and analysis of the conceptions which we have described in this work allow us to draw various conclusions. First, we have noted a relation between the stated conceptions for each of the four groups of teachers in the sample and their experience of teacher training and in-service courses. The group at the lowest level of development in its conceptions, with respect to both the conceptual aspects of heritage and questions of heritage education, is the Physics-Chemistry teachers, the group which acknowledges having received the least training in this subject area (only recently has heritage been included as part of Experimental Sciences Education). The Geography-History teachers, in contrast, show the most developed conceptions of heritage, as befits the fuller training they received in a subject that is given much greater attention in the social sciences (history, anthropology, etc.).

Second, in terms of the concept and typology of heritage, we noted the predominance of a reductionist view, particularly amongst the Physics-Chemistry teachers, and to a lesser extent the primary and Biology-Geology teachers. This view is characterised by a resistance to acknowledge as heritage things such as contemporary artistic manifestations, technological and ethnological artefacts and certain natural features within

the urban landscape. The predominating conceptions of the Geography-History teachers, on the other hand, indicate a much more global and integrated view of heritage, not only in terms of recognition of a wider range of heritage types, but also in respect of establishing relations between natural resources, the economy, society, culture and history.

Third, regarding heritage in education, our findings underline the minimal role that heritage currently plays in the day to day business of the classroom, with the exception of the Geography-History teachers. Greater homogeneity in the conceptions of the four groups was to be found, however, with respect to methodological aspects, classroom communication, and the aims of heritage education. We can conclude from this that greater training in heritage – such as that received by the Geography-History teachers – does not guarantee greater professional development in terms of teaching (Ávila, 2003b), the area which in the sample was dominated by conceptions characteristic of the traditional model as described by Porlán and Rivero (1998). Using Shulman's (1986) terminology, we can state that a greater 'knowledge of subjects-matter', as is the case of the Geography-History teachers, does not necessarily lead to a better understanding of 'pedagogical content knowledge'.

To attempt to overcome these predominating tendencies in thinking and the obstacles associated with them, we consider teacher training the key element. On the one hand, improvements should be introduced which aim to:

- a) bring the knowledge of the topic of the four groups in the sample up to date, giving emphasis to ethnological and scientific-technological artefacts, as well as a holistic and symbol-identity perspective of heritage.
- b) include heritage as another element for studying in the *teaching practice problems* element of teacher training courses for the Social Sciences and Experimental Sciences, as it can promote more active and innovative methodologies, and establish relations between local and global environmental issues.
- c) make use of *practical professional problems* sessions in in-service training so as to go deeper into aspects related to heritage teaching in the context of the Social Sciences Education and the Experimental Sciences Education.

On the other hand, regarding the teachers in our sample, it would be necessary to organise professional development around these conceptions and obstacles, selecting issues directly related to them, such as the following:

- 1) What do we know and what should we know about heritage from a holistic and symbol-identity perspective? What conceptual frames have given rise to their different interpretations, and how have these developed in time? What kinds of heritage do they distinguish and within which disciplines have they done research?
- 2) What is the role of heritage in educational courses and what should it be to achieve a complete integration into the curriculum?
- 3) What are the roles of educational providers and beneficiaries in heritage education which fosters multidirectional communication between students and teacher? What kinds of activities promote this kind of communication?
- 4) What is the ultimate aim of heritage education and diffusion and what ought it be if we wish to produce citizens committed to sustainable development who value and respect heritage artefacts of great symbolic-identifying significance?

Strategies for promoting on-going teacher development would be best organised as a series of cyclical and flexible activities with clearly differentiated stages: the first would evaluate potential difficulties and professional obstacles relating to heritage education; the second would explore the conceptions and experiences of the teachers with respect to such difficulties and obstacles, and these would subsequently be challenged and contrasted with alternative views (curricular designs and good practice, for example); finally, there would be a session of analysis and group reflection on the construction of new knowledge and a new professional practice linked to a summary of the meanings which had been developed previously, through processes linked to the design of teaching units including heritage content and to experimentation with this in the curriculum.

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