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# Perceptive accuracy and positive expectations as effective attributes<sup>1</sup>

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## SUMMARY

This brief conceptual contribution establishes some bases for the implementation of a social cognitive training programme that we are carrying out in a Spanish Teacher Education Institution (University of Valladolid at Palencia). Our suggestion is that the social cognitive ability of teachers to accurately understand students and to create expectations enhancing learning represent effective attributes. Both perceptive accuracy and positive expectations are not dispositions and abilities spontaneously acquired by teachers, but they should be a part of the professional features to be taught in teacher training institutions. To gain some control on cognitive structures and processes could be the goal that allows to reach the general aim of obtaining high levels of perceptive accuracy. On the other hand, to acquire the disposition and ability to pay attention and select the students' behaviour and social context cues that further enhance learning, could be the goal responding to the attainment of positive expectations.

*KEY WORDS: Perceptive accuracy - teacher expectations - teacher training - effective teacher behaviours - social cognition.*

## INTRODUCTION

This paper suggests that the social cognitive ability of teachers to accurately understand students and to create expectations enhancing learning represent effective attributes. We are dealing with variables pertaining to «implicit psychology», and so they work in surreptitious, barely explicit processes. The conclusion of the ideas shown in this paper seems clear for teacher education. It could be summed up in the need to include some kind of social cognitive training programme in the initial teacher education plans.

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## **ACCURACY, BIAS, AND CONSTRUCTION**

Before emphasizing social cognitive aspects of teachers in classrooms, we will put forward some components of human social cognition. They give us an idea of how complex cognition is, and are useful to put our subsequent discourse into context.

Modern theories of social cognition pay particular attention to bias and error in cognitive activities. To some extent «the fascination with error and bias seems natural or is at least a close relation of the interest most people seem to have with the abnormal and the negative» (Schneider, 1991, p. 550). But more classic approaches to social perception have provided evidence to show the human ability to know the actual attributes of people in social environments (e.g. the vast research programme carried out in the eighties by David Funder. See Funder [1989]). Thirdly, studies on expectancy effects, although they do not pertain to a cognitive approach, have assumed that teachers fail to accurately understand students. Therefore, Rosenthal and Jacobson's experiments (1968), and most of later studies suggest that teachers are involved in the task of constructing a pupil's personality, self-concept, and performance-with favourable or pernicious consequences for the child.

If we jointly consider theories in cognitive social psychology, classic social psychology, and the theoretical model on expectancy effects, and the evidence supporting all these theories, we may infer that biases in cognitive processes, accuracy in perceptive outcomes, and the construction of social reality represent oblique dimensions of social knowledge processes in classrooms. Jussim (1991; Jussim & Eccles, 1992) has argued for a similar idea in his reflection-construction model of relations between social perception and social reality. Self-fulfilling prophecies, perceptual biases, and accuracy are conceptualized as quantitative rather than qualitative phenomena-i.e. the presence of one of them does not necessarily imply the absence of the other. Evidence shown in 16 studies about teachers' social perception (see review in Alvarez, 1992a) is consistent with this hypothesis: Accuracy and bias are concurrent phenomena in social judgment tasks performed by teachers, whilst the possibility of a moderate construction of students' reality remains open.

### **IS DESIRABLE FROM A EFFECTIVENESS PERSPECTIVE TO ACCURETELY UNDERSTAND STUDENTS AND TO MAINTAIN POSITIVE EXPECTATIONS?**

Discussion in this section will be centred on how useful the prevalence of one of the social cognition components mentioned above would be from an effectiveness perspective. Specifically, we wonder if prevalence of an accurate perception –and subsequent expectations– may have advantageous effects on students' performance against bias and construction of social reality. Literature examining effective teacher behaviours may help us to answer this question.

Education researchers of the last three decades have produced a great deal of data about effective teaching behaviours. Two excellent reviews are those of Brophy (1979; Brophy & Good, 1986), while Nussbaum (1992), and especially Reynolds (1992) provide recent summaries of the field. We understand by «effective behaviour» that teacher behaviour that is directly related to students' positive outcomes. Nevertheless, literature has paid much attention to interactive behaviour, and very little to teacher thoughts about students. So, we prefer to say «effective attributes» to include behaviour, traits, thoughts, and any other kind of characteristic related to effectiveness (Alvarez & Nieto, 1993). In spite of these limitations, some studies and reviews have also considered social cognitive aspects as a part of the effective behaviour. It is worth taking a look at the reviews mentioned above with regard to this inclusion.

Empirical association between teachers' social knowledge and pupils' behaviour was reflected by Brophy in 1979:

Both naturalistic and experimental investigations have shown that teacher expectations can and often do affect how much students learn [...]. Typically, the more successful teachers have a «can do» attitude, perceiving their students as capable of learning the material and themselves as capable of teaching it to them effectively. (pp. 736-737).

Brophy and Good (1986) reaffirm the same idea in the prestigious *Handbook of Research on Teaching*. They conclude that effective teachers combine positive expectations for themselves, their classes, and their students.

But before creating expectations about pupils, teachers make judgments that may or may not reflect the real attributes of students. The correlation between teachers' understanding of pupils and teachers' effectiveness was first suggested by Gage (1958), although he could not reliably prove it. Nussbaum (1992) has recently integrated research from the fields of Education and Communication that investigate effective teacher behaviour. Teacher communication skills are derived from their perceptions, and consequently some studies have considered teachers' understanding of students when analysing teacher communication competence. For instance, Rubin and Feezel (1986) discovered some elements of teacher communication competence that are useful in predicting perceptions of teacher effectiveness. Their results indicated that a teacher's ability to obtain information, describe another's viewpoint, recognize non-understanding, and describe differences of opinion are some of the factors positively correlated to perceptions of teacher effectiveness.

In another review, Reynolds (1992) melds findings from the literature on effective teaching with those of learning to teach in order to know what a beginning teacher should be able to do. It is clearly inferred from the evidence that teachers' understanding of students strongly influence preactive, interactive, and postactive teaching tasks. Some of the desirable teacher attributes when enter the first year of teaching are: the disposition to find out about their students, and the ethnographic and analytic skills to do so, the disposition to reflect on their own actions and students' responses in order to improve their teaching, and the strategies and tools for doing so.

Briefly, an accurate teacher's perception of social reality in the classroom may help the teacher to adjust his/her didactic strategies to the real attributes and behaviour responses of students. This could be the main reason to consider accuracy in social knowledge as an effective attribute. Secondly, even though teachers are accurate in understanding students, positive expectations may be concurrent, although reflected social reality has characteristics which hardly enhance learning. The overwhelming number of studies about self-fulfilling prophecies have often made researchers confuse a self-fulfilling expectation with an expectation originating in accurate social judgments. Both types of expectations are not clearly distinguishable because of their quantitative nature, but we argue that the more an expectation is based on an accurate judgment or impression the more effective a teacher is. This is hard to defend when the emphasis is put on processes from a cognitive approach, and functional perception prevails against accuracy based on correspondence to some criterion.

Our opinion is that to the degree that a teacher reflects students' attributes, the teacher's thoughts and behaviour will more likely be appropriate and adjusted to the learning contexts and, therefore, effective. If additionally a teacher is able to extract from the students' behaviour and social context the cues that further enhance learning, he/she will be in a position to establish and maintain positive expectations, and hence this teacher would combine the two effective attributes discussed in this paper: the disposition and ability to accurately understand students, and the disposition and ability to create positive expectations.

## **THE NEED OF SOCIAL COGNITIVE EDUCATION**

Both perceptive accuracy and positive expectations are not dispositions and abilities spontaneously acquired by teachers, but they should be a part of the professional features to be taught in teacher training institutions.

Social memory structures (e.g. implicit personality theories, stereotypes, prototypes, scripts, self-schemes) that occasionally distort judgments (Alvarez, 1992b), and cognitive and motivational biases implicit in the inferential process, work in subtle ways, automatically. To gain some control on cognitive structures and processes could be the goal that allows, in turn, to reach the general aim of obtaining high levels of perceptive accuracy. On the other hand, to acquire the disposition and ability to pay attention and select the students' behaviour and social context cues that further enhance learning, could be the goal responding to the attainment of positive expectations.

The key word is «control» in the two goals. The need to be minimally aware of how teachers' social knowledge operates is important not only to enhance learning but not to prevent it by, for instance, taking away motivation from students or damaging their self-concept. Babad, Bernieri, and the pioneer in the studies on teachers' expectancy effects in the classroom, Robert Rosenthal (Babad et al., 1989),



provide illuminating data on the need for control issue. They showed that negative affect was transmitted to low expectancy students mostly through the non-verbal channels, particularly the face. While the teachers were more negative emotionally when talking about and to their low expectancy students, they compensated by directing more active teaching behaviour at them. Such compensation does not nullify the negative non-verbal communication, but at least teachers were able to find a controllable way of balance. On the contrary, non-verbal channels are much less controllable. With regard to the other effective attribute that we support in this paper, Babad et al. argue that either biased teachers were more negative in their communication style, or they manifested stronger expectancy effects than unbiased teachers. In any of both alternatives negative expectations may have more pernicious consequences for children. As is evident from this study, the need for control could be extended to the communication channels, and not only be comprised within the cognitive sphere. But it is also obvious that teachers' perception or knowledge of social reality determines their communication styles. So awareness should be applied first to cognition.

The inclusion of the proposed goals in the teacher education plans may contribute to reduce the unrealistic prospective teachers' views of student differences, that are often idealistic and more coherent in abstract than concrete situational terms (Esteve, 1987; Paine, 1989). International organizations and conferences have argued for this inclusion too. The OECD (1991) suggests that effective teaching is basically due to personality characteristics, as for example teachers' understanding of pupils. Nevertheless, there are very few institutions that select prospective teachers according their personality. Finally, in the VII Conference of the Association Internationale de Recherche sur la Personne de l'Enseignant, Esteve y García (1992) suggested that the practical initial training should enable teachers to analyse factors influencing classroom climate, and to know responses that teaching styles produce on students.

After all, if students are the focus of teachers' perception in interactive teaching –according to Clark and Peterson's review (1986), between 39% and 50% of interactive thoughts are about pupils– it seems logical that prospective teachers should be taught to think about and understand students, as they are trained to think about curriculum aims, methodology, use of curriculum materials, or assessment.

## CONCLUSIONS

Basically, we have suggested three ideas in this paper, that may be useful for a further discussion:

- 1.– Teachers' social knowledge about students contains different components. Three of them are accuracy, bias, and construction of social reality. The stress on the first one, i.e. understanding of students' personality, is related to teachers' effectiveness.

- 2.- Positive expectations originating in social reality versus self-fulfilling prophecies, contribute to effectiveness insofar as predictions are based on students' behaviour and social context cues that enhance learning further.
- 3.- Therefore, the disposition and ability to accurately understand students, and the disposition and ability to create positive, reality-based expectations, should be a part of the professional features to be taught in teacher training institutions. To gain some control on social cognitive processes may help prospective teachers to avoid biases in different stages of perception, and to pay attention and select positive cues from students.

With regard to the training we are suggesting, it should be found an answer to some questions before implementing a social cognitive training programme in a Teacher Education Institution. We propose the following sequence of questions:

#### TWO QUESTIONS OF FEASIBILITY

- 1.- From our experience as lay perceivers, would we predict that awareness of errors –and their sources– when judging other people may change our way of understanding them, or are cognitive routines so consistent that they can hardly be changed?
- 2.- The answer to the first question has direct implications for this one. Do we think that social cognitive aspects can be taught or learnt? (some psychological programmes to eradicate statistical biases in social perception have not yielded the expected reliable results).

#### A QUESTION OF CONVENIENCE

- 3.- Do we consider that social perception in classrooms is pragmatic, functional enough and there is no need to introduce changes in teachers' understanding of students?. Or do we think that it is worth –from an effectiveness perspective– trying to modify prospective teachers' cognitive processes?

#### A QUESTION OF PRIORITY

- 4.- If we assume that it is worth modifying prospective teachers' perceptions, are social cognitive aspects relevant enough as to be introduced in a teacher education plan?, or do not they have the necessary level of priority required to be a part of this plan?.

#### REFERENCIAS

- ÁLVAREZ CASTILLO, J.L. (1992a): «Sagacidad perceptiva y teorías implícitas de personalidad de los profesores de enseñanza primari». Salamanca: Publicaciones Universidad Pontificia.
- ÁLVAREZ CASTILLO, J.L. (1992b): «Validez de las teorías implícitas de personalidad de profesores de Educación General Básica». *Revista de Psicología Social*, 7, 149-173.

- ÁLVAREZ CASTILLO, J. L., & Nieto Bedoya, M. (1993): «El conocimiento social del profesorado y los materiales curriculares». Salamanca: Amarú.
- BADAD, E.; BERBIERI, F. & ROSENTHAL, R. (1989): «When less information in more informative: Diagnosing teacher expectations from brief samples of behaviour». *British Journal of Educational Psychology*, 59, 281-295.
- BROPHY, J. (1979): «Teacher behaviour and its effects». *Journal of Educational Psychology*, 71, 733-750.
- BROPHY, J. & GOOD, T. (1986): «Teacher behaviour and student achievement». In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 328-375). New York: MacMillan.
- CLARK, M. & PETERSON, P. (1986): «Teachers' thought processes». In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 255-296). New York: MacMillan.
- ESTEVE ZARAZAGA, J.M. (1987): «El malestar docente». Barcelona: Laia.
- ESTEVE ZARAZAGA, J.M. & GARCÍA CARRASCO, J. (1992, April): «Estado actual de la investigación sobre la personalidad del docente». *Paper presented at the VII Conference of the Association Internationale de Recherche sur la Personne de l'Enseignant*, Salamanca, Spain.
- FUNDER, D. (1989): «Accuracy in personality judgment and the dancing bear». In D. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions* (pp. 210-223). New York: Springer-Verlag.
- GAGE, N. L. (1958): «Explorations in teachers' perceptions of pupils». *Journal of Teacher Education*, 9, 97-101.
- JUSSIM, L. (1991): «Social perception and social reality: A reflection-construction model». *Psychological Review*, 98, 54-73.
- JUSSIM, L. & ECCLES, J.S. (1992): «Teacher expectations II: construction and reflection of student achievement». *Journal of Personality and Social Psychology*, 63, 947-961.
- NUSSBAUM, J. (1992): «Effective teacher behaviour». *Communication Education*, 41, 167-180.
- O.C.D.E. (1991): «Escuelas y calidad de la enseñanza. Informe internacional». Madrid: Paidós-M.E.C.
- PAINE, L. (1989): «Orientation towards diversity: What do prospective teachers bring?». E. Lansing, MI: *National Center for Research on Teacher Education*.
- REYNOLDS, A. (1992): «What is competent beginning teaching?». A review of the literature. *Review of Educational Research*, 62, 1-35.
- ROSENTHAL, R. & JACOBSON, L. (1968): «Pygmalion in the classroom». New York: Holt, Rinehart, & Winston.
- RUBIN, R. & FEEZEL, J. (1986): «Elements of teacher communication competence». *Communication Education*, 35, 256-268.
- SCHNEIDER, D. (1991): «Social cognition». In M. Rosenzweig & L. Porter (Eds.), *Annual Review of Psychology* (Vol. 42, pp. 527-561). Palo Alto, CA: Annual Reviews Inc.