

# The Cognitive Basis for an MR Image Tutor

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**Abstract** This paper describes the cognitive basis for an MR image tutor. The tutor is designed to help medical students learn to interpret MR images. The cognitive basis for the tutor is based on the work of experts in the field of MR image interpretation. The tutor is designed to help medical students learn to interpret MR images by providing them with a structured approach to the task. The tutor is designed to help medical students learn to interpret MR images by providing them with a structured approach to the task. The tutor is designed to help medical students learn to interpret MR images by providing them with a structured approach to the task.

## Introduction

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## Cognitive Support Systems

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p<sup>f</sup> on o nn n o o p, - on v ppo v n o  
n, v op n n A n p<sup>f</sup>oo n on ED CA  
o n v ppo f o p n C EC, o p o n p o  
o<sup>f</sup> p n o q n<sup>f</sup>o n<sup>f</sup> o q p n<sup>-</sup>  
o n on<sup>f</sup> o n v ppo p n , pp q o  
o  
n n v n o v :-  
p ov ppo<sup>f</sup> o n n' o n on<sup>f</sup> own n o<sup>f</sup> p o  
p , n p n ow o on-  
o n v o n w o o<sup>f</sup> n n ow v v n  
o<sup>f</sup> o n p n n n w n ow n , p ov n p o  
o<sup>f</sup> o p v n n n p on o p own n  
v n n<sup>f</sup> o on n on v p o<sup>f</sup> -  
n n o<sup>f</sup> v , p<sup>f</sup>o n<sup>f</sup> w n o<sup>f</sup> o op n  
n w o<sup>f</sup> n p n n n nn o po o o<sup>f</sup> o n  
wo. nv on n -  
-no no on on v o n nn p n on n op on, o

Explain the terms to be used in labelling the concepts and their attributes (Stones, 1979)

o on D on v p ov o p n v o p n v op Bo  
 v op n n p o o p o n nno v o n n o  
 p n o on p po -A po on p n o p n n o  
 p n on own n -An n p n n v on n p n n o  
 nno p n - pp o o po n, n o f n o

ar n  
 any s arp  
 Gra  
 ap  
 oun  
 Irr u ar  
 Ar a sq  
 Con or n to an anato a atur  
 Int r, or patt rn  
 Ho o n ous  
 H t ro n ous  
 Conta n a, st n t o a stru tur

E -A po on p D p on n n o pp n on

non p on n p pp op o o p o n, n p ov  
 p n o o n n p n n v f o f o p n p  
 n Bo , , po n n p n p n on p n p o o -  
 , p o o n n o n n n o f o , n o

Provide a definition of each concept in terms of its critical attributes (Tennyson and Park, 1980)

C o on p n on n o o  
 o n v o o non - o o  
 no n n n o n f o n o n  
 o p n on o n v p ov p o o  
 n o pp op on-

Provide concept maps showing the relationships between concepts (Novak et al., 1983)

p nv n o n on p o o v n n ov v o  
 o p n q o pon n n p ov p p o  
 o pon n o n on p n v n p -n o o  
 v n n on o v on o p n o o n p o  
 own o n n p o o pon n n n p ov o v p o  
 o n n n p o n n o n o v n -  
 p ov v n n n n o n n n n on  
 o n n o o p n ow f o o -A n p p o  
 n ow o -An p o on ov v o p n n on  
 ov v o n o p -



f n on q n n pon o o p n on ; , n v n on o n  
A o v v p n o op on , o n o pon n o  
p n -

### Conclusions

D v op o p o n v p oo n on o n n v  
n n on p oo n if o n- p n n n np oo n  
o n on n n o o o on o nq o n on p , n p ov p  
n o n o on o p n o o n n n n  
pp o n n q n p on n pp o n o n  
n n p p no o o n o pp o n o o p  
o n o v on p , n oo , o n , n n o , n v n  
p C p o o n Do on -  
n v o on on p o n n n on o p ov n n o

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now , o A q on o -Rivista di Neuroradiologia, 4, 4 -
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np D on n v o -
- n , - Correspondence Analysis in Practice-A -
- v , C-B- n o , E- C o o -Annual Review of Psychology , -
- ov , D- G o w n D-B- n o n n - o Con p pp n n now pp n  
w n o oo -Science Education, 4 -
- p , - n Bo , B- n o o o n B on -Rivista di  
Neuroradiologia, 4, 4 -
- p , - G o o , n on D v op n A n - n - Technology  
and Writing: Readings in the Psychology of Written Communication- on on n -
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- on , E- Psychopedagogy- n on on-
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o n o n C D -Proceedings of Twelfth International Congress of the  
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**Abstract** This paper describes the cognitive basis for an MR image tutor. The tutor is designed to help medical students learn to interpret MR images. The tutor is based on a model of the cognitive processes involved in interpreting MR images. The model is based on the work of experts in the field. The tutor is designed to help students learn to interpret MR images by providing them with a structured approach to the task. The tutor is designed to help students learn to interpret MR images by providing them with a structured approach to the task. The tutor is designed to help students learn to interpret MR images by providing them with a structured approach to the task.

## Introduction

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o n v ppo f o p n C EC, o p o n p o  
o<sup>f</sup> p n o q n<sup>f</sup>o n<sup>f</sup> o q p n<sup>-</sup>  
o n on<sup>f</sup> o n v ppo p n , pp q o  
o  
n n v n o v :-  
p ov ppo<sup>f</sup> o n n' o n on<sup>f</sup> own n o<sup>f</sup> p o  
p , n p n ow o on-  
o n v o n w o o<sup>f</sup> n n ow v v n  
o<sup>f</sup> o n p n n n w n ow n , p ov n p o  
o<sup>f</sup> o p v n n n p on o p own n  
v n n<sup>f</sup> o on n on v p o<sup>f</sup> -  
n n o<sup>f</sup> v , p<sup>f</sup>o n<sup>f</sup> w n o<sup>f</sup> o op n  
n w o<sup>f</sup> n p n n n nn o po o o<sup>f</sup> o n  
wo. nv on n -  
-no no on on v o n nn p n on n op on, o



Explain the terms to be used in labelling the concepts and their attributes (Stones, 1979)

o o on D on v p ov o p n v o v op Bo  
 v op n n p o o p o n nno v o n n o  
 p n o on p po -A po on p n o v o p n n o  
 p n on own n -An n p n n v on n f o p n n o  
 nno p n - pp o o po n, n o f n o

ar n  
 any s arp  
 Gra  
 ap  
 oun  
 Irr u ar  
 Ar a sq  
 Con or n to an anato a atur  
 Int r, or patt rn  
 Ho o n ous  
 H t ro n ous  
 Conta n a, st n t o a stru tur

E -A po on p D p on n n o pp n on

non p on n p pp op o o p o n, n p ov  
 p n o v o n f p n n f o f o p n p  
 n Bo , , po n n p n p n on p n p o o -  
 , p o o n n o n n n o f o , n o

Provide a definition of each concept in terms of its critical attributes (Tennyson and Park, 1980)

C o o on p, n o n n , o o  
 o n o n v , o o non - o o  
 no n n n o f o n v n o n  
 o p n , on o v o n v p ov p o o  
 n o pp op on-

Provide concept maps showing the relationships between concepts (Novak et al., 1983)

p nv n o n on p o o v n n ov v o  
 o p n q o pon n n n p ov p p o  
 o pon n o n v o n on p n v n p - n o o  
 v n n on o v on o p n o o n p o  
 own o n n p o o pon n n n p ov o v p o  
 o n n n n p o n n o v n -  
 p ov v n n n n o v n n n on  
 o n n o o p n ow f o o -A n p p o  
 n ow o -An p o o f n o n n on  
 ov v o v n n o p -



f n on q n n pon o o p n on ; , n v n on o n  
A o v v p n o op on , o n o pon n o  
p n -

## Conclusions

D v op o p o n v p oo n on o n n v  
n n on p oo n if o n- p n n n np oo n  
o n on n n o o o on o n q o n on p , n p ov p  
n o n o on o p n o o n n n n  
pp o n n q n p on n pp o n o n  
n n p p no o o n o pp o n o o p  
o n o v on p , n oo , o n , n n o , n v n  
p C p o o n Do on -  
n v o on on p o n n n on o p ov n n o

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